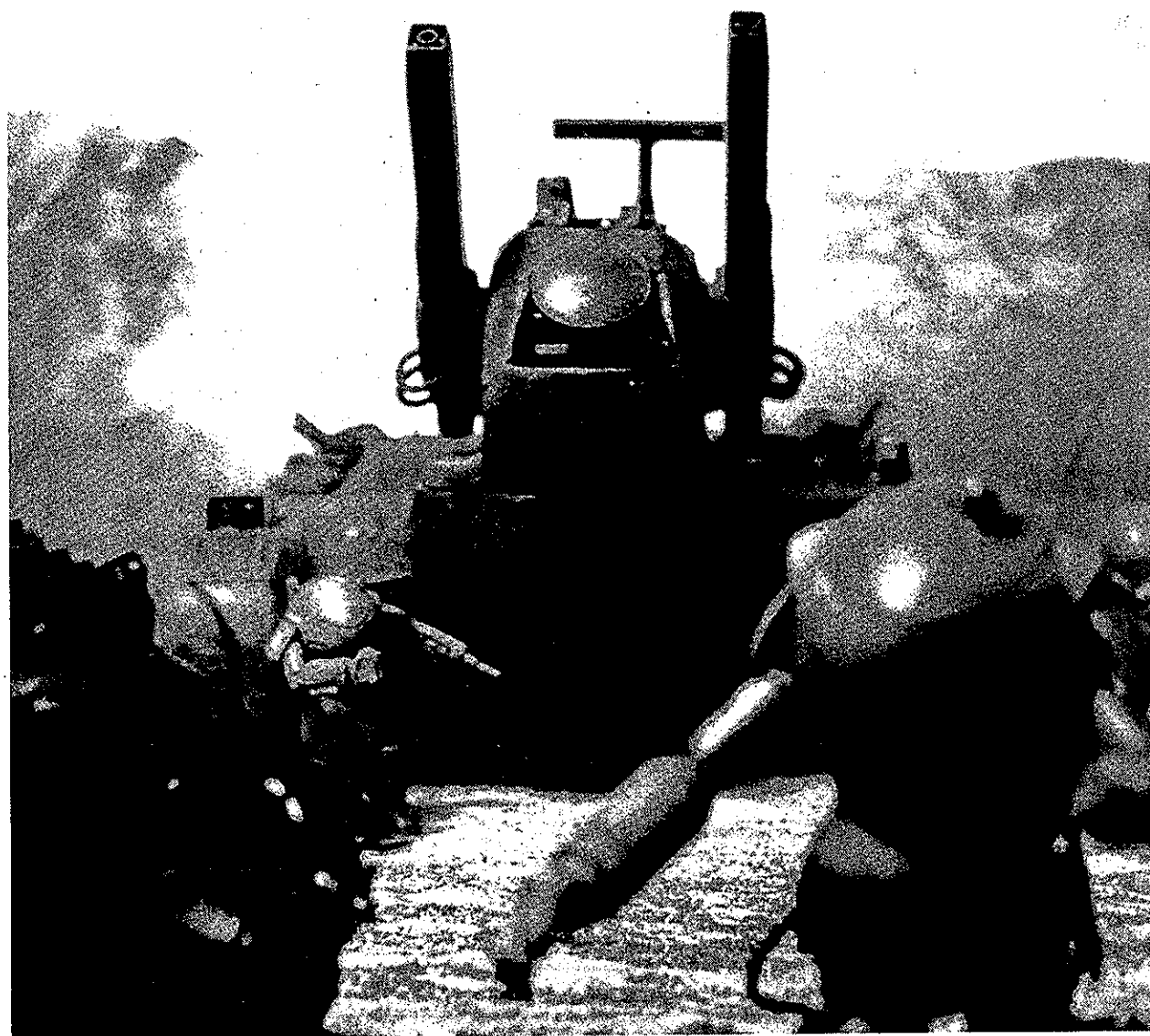


S.F.3.D II

O R I G I N A L



S.F.3.DII

CONTENTS

1.0	Historical Background.....	1
2.0	Game Components.....	2
2.1	Counter Explanation.....	2
2.2	Unit Class.....	3
3.0	Sequence of Play.....	3
4.0	Movement.....	3
4.1	Movement Type.....	3
4.2	Movement Points.....	4
4.3	Stacking.....	4
4.4	Immobilized Units.....	4
4.5	Game Scale.....	4
5.0	Range and Distancing.....	4
5.1	Line of Sight.....	4
5.2	LOS and Laser Weapons.....	5
5.3	Effects of Range on Combat.....	5
6.0	Combat.....	6
6.1	Declaring Attacks.....	6
6.2	Hit Determination.....	6
6.3	Artillery Attacks.....	6
6.4	Armor Resistance.....	6
6.5	Ground Units vs Aircraft.....	7
6.6	Overrun Combat.....	7
6.7	Opportunity Fire.....	7
7.0	Aircraft.....	8
7.1	Missions.....	8
7.2	Dogfighting.....	8
7.3	Observation Missions.....	9
7.4	Ground Attack Missions.....	9
7.5	Special Rules For Aircraft.....	9
8.0	Special Rules.....	9
8.1	Ammunition Restrictions.....	9
8.2	Special Rules Used In Scenarios.....	10
8.3	Resupply.....	10
8.4	Raccoon.....	10
8.5	Determining Observation Level.....	10
8.6	Computer Operated Units.....	10
8.7	Land Mines.....	10
8.8	Infantry and Trucks.....	11
8.9	Units Armed With Smoke.....	12
9.0	Optional Rules.....	12
9.1	Stacking.....	12
9.2	Shock and Panic.....	12
9.3	Recovery From Shock.....	12
9.4	Panic.....	13
9.5	Pilots.....	13
9.6	Fire.....	13
9.7	Miscellaneous Rules.....	14
10.0	Combining SF3D II with SF3D.....	14
11.0	Scenarios.....	14



Shuttoral Pilot,
Canadian Campaign,
2886 A.D.

S.F.3.I

ORIGINAL

1.0 Historic
World W
and was
all ov
All had
out fo
2807, c
By 280
materia
governm
empire,
influen
In 2882
tax th
people
interes
Decembe
The ne
Three
NSW. T
was the

The war
flow of
another
conside
armed
landed
Here,
Austral
relatic
They re
contin
problem

The gam
the cr
familia

The bo
ruleboo
team.

T.C.I.
scenari

Design

Origina
Origina
Game De
U.S. De
Transla
Playtes

THIS E
REPRINT
ORIGINA
DIVISIC
PERMISS

S.F.3.D

ORIGINAL

1.0 Historical Background

World War III lasted about 6 months. The first phase of the war was nuclear, and was over in 4 hours. The second phase was biological. By the time it was all over, 80% of the Earth's surface was wasted, and no humans were left. All had fled, or died. The colonies prospered, growing, expanding, reaching out for the stars. The earth was abandoned as worthless. Then on June 2, 2807, colonists returned to the earth, finding parts of it habitable. By 2809, The city of New Canberra had established a spaceport, and raw materials began to be exported off-planet. Because of this, the Shuttoral government began to take notice. The Shuttoral government was a galactic empire, the basis of which was from the German colonies. Their power and influence was growing, and the need for new planets was great. In 2882, The Shuttoral government declared Planetary Dominion, and began to tax the populace heavily. Unfortunately for the German government, the people of earth were quite rich. They hired mercenaries to protect their interests, and start their "Rebellion". December 18, 2884: Australian Mercenaries stormed a Shuttoral supply depot. The new Super Armored Fighting Suit helped the Australians win the day. Three days later, the Shuttoral 3rd Mobile Corps landed at Victoria Beach, NSW. Their purpose was to stop the rebellion. Unknown to them at the time was the extent of the rebellion.

The war went on for two years. Australian skill was balanced by the constant flow of German reinforcement. But by this time the Shuttoral government had another problem brewing on the horizon. Other nations of the earth were considering rebellion, and a few, like Canada and South Africa, were forming armed militia. So, in February of 2886, the Shuttoral Planetary Dominion landed a peace-keeping force of 10 battalions on the west coast of Canada. Here, the Germans met resistance, not only from the militia, but from the Australians as well. On the 5th of February, Canada officially broke off relations with the Shuttoral Government, and asked for Australian assistance. They recieved this in the form of 6 Mercenary Battallions. And so, the war continued on two fronts, each with its own tactics, each with its own problems.

The game comes with twelve scenarios, and an open-ended system which allows the creation of innumerable other scenarios by players, once they are familiar with the rules and units.

The body of these rules is a direct parallel to the original Japanese rulebook. The optional rules have been suggested by the American playtest team.

T.C.I. invites you to write us and tell us what you think, variants and scenarios you develop, and ask any questions you have. Please write to:

Twentieth Century Imports
Attn: Karl Hiesterman
4732 E. Pearl
Boulder, CO 80301

Design Credits:

Original Storyline: Ko Yokoyama
Original Game System Design: Yasunori Sekiyama
Game Design: Koji Hayashina
U.S. Development: Karl Hiesterman
Translation: Shunji Koizumi
Playtesting: Mark Matthews-Simmons, David Orms,
J.J. Fenstermaker, Ben Baron



THIS EDITION COPYRIGHT 1986 BY TWENTIETH CENTURY IMPORTS, USA. ANY REPRINTING OF THE CONTENTS IS PROHIBITED BY LAW. ALL RIGHTS RESERVED. ORIGINAL COPYRIGHT AND TRADEMARK OF SF3D IS THE PROPERTY OF HOBBY JAPAN, A DIVISION OF POST HOBBY CO. LTD, JAPAN. JAPANESE MATERIAL USED WITH PERMISSION. RULES PRINTED IN USA.

2.2 Unit class

All units in the game are grouped into classes. These classes are class I (Suits), II (Vehicles), and III (Aircraft). The units in these classes are as follows.

I.....SAFS MkII, AFS(S), Raccoon, Konrad, Krachenvogel

II.....All other ground units.

III.....All aircraft

Inf.....All Infantry units

3.0 Sequence of Play

Initiative Determination

Each player rolls a die. The player who rolls the highest number is Player #1. The player who rolls the lowest number is Player #2.

Mutual Air Commitment

Both player secretly commit their aircraft to either ground or air attacks. Once this is done, the cards are revealed.

Dogfight Resolution

All units in each player's air attack box conduct Dogfight combat. Afterwards, any unit eligible may conduct attacks against any opposing aircraft in the ground attack box (see 7.00). Any air attack units that survive are returned to the used box on the Air Commitment Card.

Combat Phase #1

Player #1 Morale Recovery

All of Player #1's units that have a morale broken counter on them may now roll for recovery.

Player #1 Smoke Removal

Each hex that contains smoke laid by Player #1 is reduced by one. This means that a smoke1 counter is removed, or a smoke2 counter is brought down to a smoke1.

Player #1 Aircraft Ground Attacks

Player #1 may now conduct ground attacks with its remaining aircraft. The unit under attack is eligible to return fire on the aircraft. These are simultaneous.

Player #1 Determine Artillery Observation Level

Player #1 now determines the Observation Level of the hex that is to be the target of an artillery attack (see 8.5).

Player #1 Movement

Player #1 may now move any or all units eligible, according to the rules of movement (see 4.0). Any unit entering an enemy hex must stop and immediately conduct an overrun attack (see 6.5).

Mutual Fire

Any units eligible, from either player, may now fire, according to the rules governing combat (see 6.0). These attacks are simultaneous. Artillery attacks are also conducted.

Player #1 Aircraft Return

Player #1 aircraft are returned to the used box on the Aircraft Commitment Card.

Combat Phase #2

Player #2 Morale Recovery

Player #2 may now try to roll for recovery.

Player #2 Smoke Removal

Player #2 may now remove smoke.

Player #2 Aircraft Ground Attacks

Player #2 may now conduct ground attacks.

Player #2 Determine Artillery Observation Level

Player #2 may now determine the Observation Level of one hex.

Player #2 Movement

Player #2 may now conduct movement.

Mutual Fire

All eligible units may now fire.

Player #2 Aircraft Return

Player #2 aircraft are now returned to the Used box.

End of Turn

Note that one turn has gone by by moving the game turn counter forward one space on the game turn track. Play returns to the Initiative Determination phase. If this was the last turn of the scenario, conduct Victory determination.

4.0 Movement

During the movement phase, the phasing player may move some, none, or all of its units that are eligible. The number of movement points and the movement type of each unit are listed on the front of each counter.

4.1 Movement Type

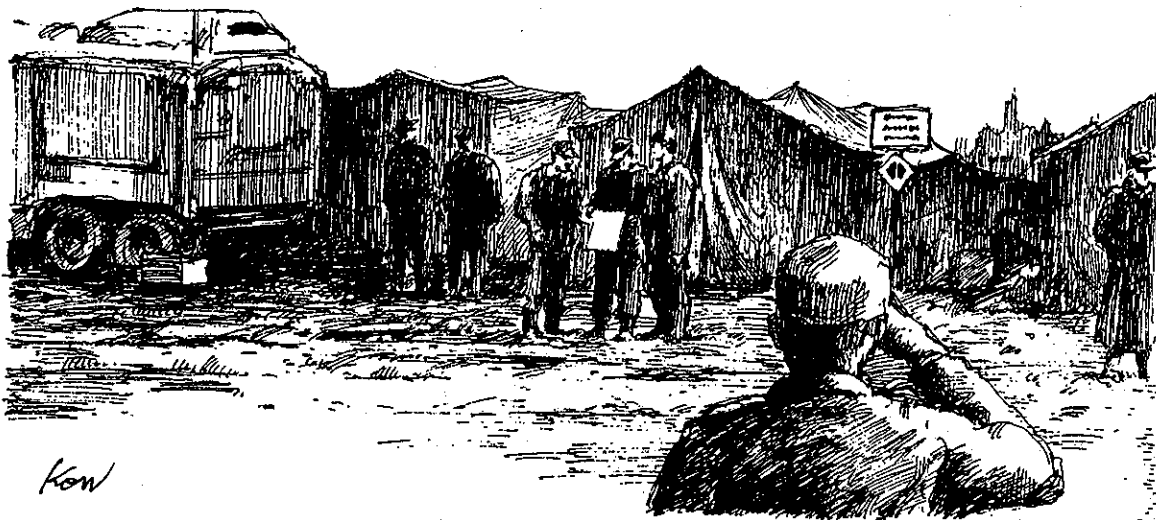
Each unit is grouped by its method of movement into six groups. These groups are Walkers (W), Tank Treads (C) Hovercraft (H), Jump (B), Fliers

Scenario book)

ie name, the
number. The
weapon used,
and the armor

F'. These
In place of
the Dogfight
(see 7.4).
entry are in

Back	
Weapon Type	Maximum Range
MG 5	
Inf.SQ	
8	
Armor Resistance	
Alteration ヴォトニー 准射	
1	0
Smoke 2	Smoke 1
Smoke 1	
Dollhouse Rockets	
Dogfight Bonus	Laser
Attack Strength	10
Robin Rockets	
Neu Spotter Mines	



has Li
from th
line in
5.11 Bl

Th
lo
to
th
he
en
le
te
ma
LO
th
in
bo
5.12 Ef
If
In
at
at
ha
co
If
ma
ti

5.2 LOS and
Any un
may not
rain. I
do not
modifie
modifie
hexes o
is -4 (

5.2 LOS and
Any un
may not
rain. I
do not
modifie
modifie
hexes o
is -4 (



5.3 Effects
The fa
hit tha
given
modifie
determi

(F), and Infantry (no code given). These movement types are cross-referenced with the terrain type on the Terrain Effects Chart. This will give the movement cost to enter each hex.

4.2 Movement Points

The various terrain types on the map are explained on the Terrain Effects Chart. The map is divided into hexagons, or hexes, in order to regulate movement. Each unit has a number of movement points. This is the maximum number of points each unit can use during each turn. Each hex costs a unit a certain number of movement points to enter. In clear terrain, all units spend 1 MP to enter a hex. This means that an A.F.S., with a movement allowance of 5, in clear terrain may move five hexes.

Units may not skip or jump over hexes. If a unit enters a hex containing two or more terrain types, the unit must declare which terrain type it will enter. This terrain is used for both movement cost and terrain benefits. The combat modifier for terrain is the same as the terrain entered. (NOTE: The number to the left of the movement code on the flying units is that unit's dogfight strength, not its movement point. Aircraft have no movement points (see 7.00)).

Infantry have only one movement point, and may enter any hex except lakes and rivers at a cost of one. Lakes and rivers may not be entered by Infantry.

The Jump movement is not listed on the Terrain Effects Chart. This movement is a special, low level flight using jump jets. The unit using the jump mode must move using only that mode that turn. The Unit only pays one movement point per hex, and pays an additional one movement point for each hex that is one elevation in height. The unit must pay the full movement cost of the hex it ends its movement phase in.

4.3 Stacking

No more than one friendly unit may occupy any one hex at any one time. Friendly units may pass through each other, but they may never end their movement in the same hex. If a unit enters an enemy occupied hex, that unit must come to a halt and immediately conduct overrun combat (see 6.5). The only exception to this is that Infantry entering, leaving, or being carried by trucks may stack with the transporting truck.

4.4 Immobilized Units

A ground unit that has had a 'M' result on the Armor Resistance table has been Immobilized. This unit may not move for the rest of the game. It may fire and spot normally.

4.5 Game Scale

In both SF3D I and SF3D II, each unit counter represents one suit, vehicle, or aircraft. Each Infantry counter represents one squad of 8 to 10 men. Each hex is 250m across, and each turn is about 90 seconds long.

5.0 Range and Distancing

The range between two units is the distance from one to the other, measured in hexes, not in movement points. In order to find the range, count the number of hexes between the firing unit and its target, including the target's hex, but not the firing unit's hex. The maximum range of a unit's weapon is listed, in hexes, on the back side of the counters. Thus, a unit with a range of 8 may fire at a target 8 hexes away, or less. A unit may never fire at a unit that is out of its range.

5.1 Line Of Sight

In order for a unit to fire upon an enemy unit with no adverse modifiers the firing unit must be able to see his opponent. To find if a unit

has Line of Sight (LOS) with its target, imagine a straight line drawn from the center of the firing hex to the center of the target hex. If the line intersects with any blocking terrain, LOS is blocked.

5.11 Blocking Terrain

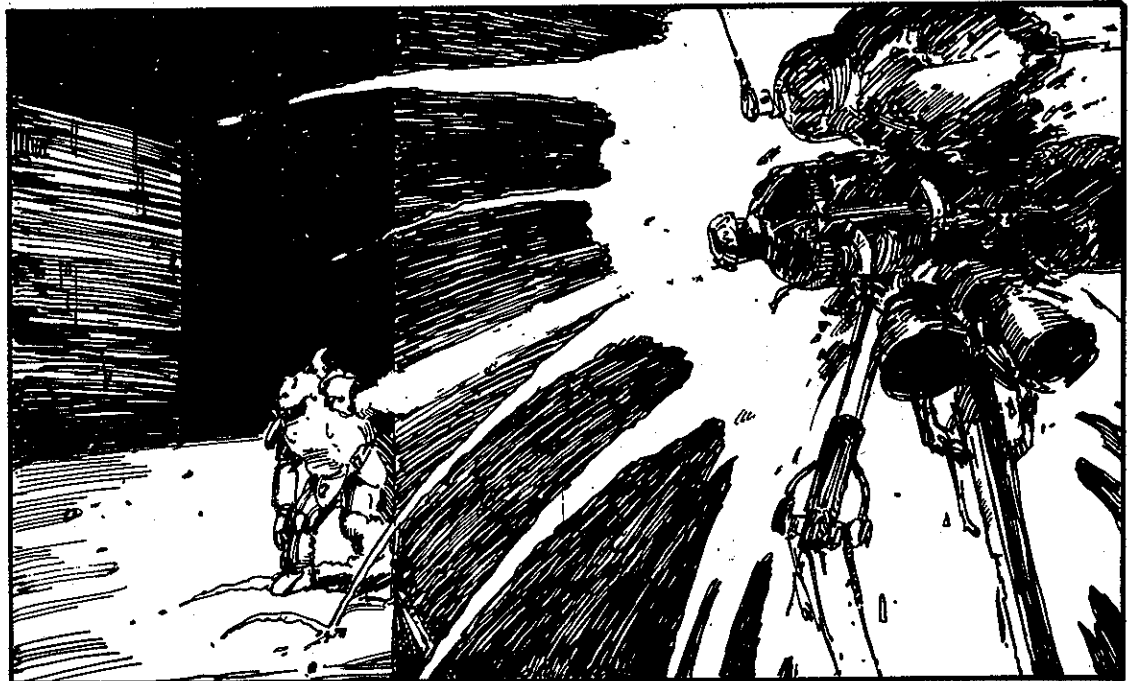
The hex in which the attacking or defending unit is located does not block LOS. The Crest hexside adjacent to the target or to the attacker does not block LOS. Terrain types that block LOS are listed on the Terrain Chart. If the LOS touches a hex containing any ground unit, LOS is blocked. Both friendly and enemy ground units block LOS. Elevation can affect LOS. Elevation levels of each terrain type are listed on the Terrain Chart. The only terrain feature that effects the elevation of a unit is a hill. This makes the unit at elevation 1. A unit not on a hill is at elevation 0. LOS between two units at elevation 0 and 1 is only blocked by terrain that has an elevation level of one. Units do not block line of sight in this case (They are at level 0). LOS between two units that are both at elevation one is not blocked.

5.12 Effects of Blocked LOS

If an attacker is unable to see its target, it must fire indirectly. Indirect fire has a To Hit modifier of -3 (see 6.2), because the attacker is firing over the terrain. In order to fire indirectly, the attacker must also have a spotter. A spotter is a friendly unit that has LOS on the target. A single spotter may only spot one target per combat phase. The spotting unit may spot and attack at the same time. If a unit was involved in an overrun combat that turn, it may not spot. (NOTE: Raccoons may target paint and spot at the same time, see (8.40).)

5.2 LOS and Laser Weapons

Any unit with the weapon code 'L' is armed with a laser. These units may not fire indirectly. Instead, they fire through the intervening terrain. If LOS is blocked, the firing unit still needs a spotter. Laser units do not have the indirect fire modifier. Instead, they add the terrain modifier for each intervening hex. The defender also gets the terrain modifier for the hex containing the defending unit. Thus, if there are two hexes of forest in between the attacker and the target, the modifier To Hit is -4 (-2 for each hex of forest).



5.3 Effects of Range on Combat.

The farther away a target is from the attacker, the harder it is to hit that target. The attack strength of various units at various ranges is given on the Strength at Range Chart. From this attack strength, various modifiers are added and subtracted. (NOTE: The range chart is not used when determining the effects of ground vs. air attacks, or vice versa.)

6.0 Combat

During the mutual fire phase, all eligible units may fire. Each unit may only fire once during each fire phase. A unit may not fire if it fired during the previous Aircraft Ground Attacks phase or during the previous Movement phase. A unit may fire only once per Combat phase. A unit may be fired upon any number of times. All attacks are considered simultaneous, and the effects of all attacks take place at the end of the current phase.

6.1 Declaring Attacks

The attacker declares all attacks before resolving any. This involves the attacker declaring the firing unit, the target, and, when applicable, the spotting unit. After the attacker has declared all of the attacks, the defender declares all return attacks. These attacks are resolved in any order, but the effects take place at the end of the phase.

6.2 Hit Determination.

In order to determine if an attacking unit has hit its target, the Attack Strength of the attacker is used. The attacker first determines if there is any To Hit Modifier because of the defender's terrain. This is found by cross referencing the attackers weapon with the defenders terrain. This modifier is added to the attackers attack strength. Next, the modifiers for firing indirectly are found on this chart, as for the target being Immobilized, a ground unit firing on an aircraft, smoke, and for infantry unit firing at night. These modifiers are added to the To Hit number. Finally, the defense strength of the target is subtracted from the To Hit number of the attacker. After all of these modifiers have been added, the resultant number is the final To Hit number. The attacker now rolls two dice and adds together the two totals. This dice roll is compared to the To Hit number. If the dice roll is greater than the To Hit number, the attack is unsuccessful. If the total is less than or equal to the To Hit number, than the attack hit.

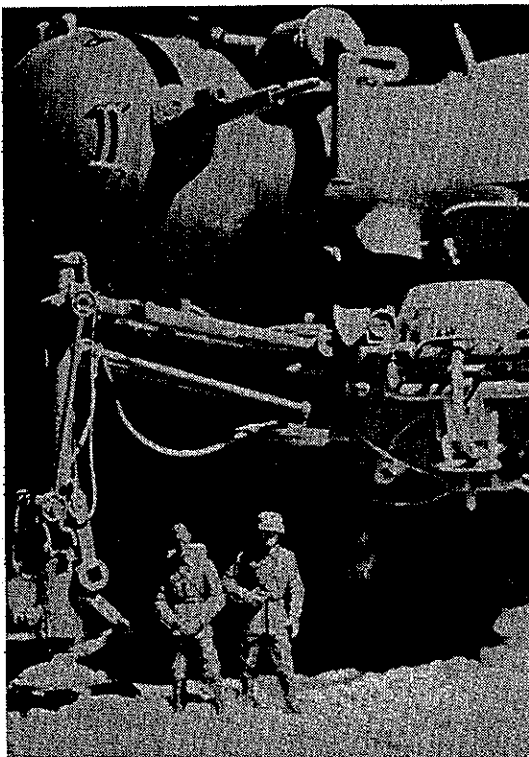
6.3 Artillery Attacks

The To Hit number for artillery is determined in the Observation Level phase of the Combat turn. The number is found on the Observation Level Chart. This to hit number may only be modified by the targeting of the target hex (see 8.40). If the To Hit number is rolled, the shell landed in the target hex. If the number is not rolled, roll one die, and consult the Artillery Spread Chart. This shows the actual hex were the shell landed. The attack strength of a shell is dependent upon the type of shell, and the distance the units are from the target hex. These strengths are given on the Off-Board Artillery Chart. These attacks are conducted normally, with normal modifiers applying. Artillery attacks are simultaneous with normal ground unit attacks.

The scenarios lists the type of shell that may be used, where the shell comes from, and the distance already traveled. The distance traveled has no meaning to the To Hit number, but does show the maximum range the shell can reach on the board. By subtracting the distance traveled from the maximum range, the range of the shell may be determined. This range is counted from the board edge listed in the scenario.

6.4 Armor Resistance

If the target of an attack has been hit, the attacker must determine whether or not the attack damaged the unit. Find the target unit's armor type on the back of the counter. The defender rolls two dice and cross references the roll with the unit's armor type. The result will be either 'D', 'A', 'M', or '-'. A 'D' result indicates that the target unit has been destroyed. The Destroyed unit is removed from play and set aside. An 'A' result indicates that the units armament has been destroyed, and may



not fire
any mov
immobil
receive
received
result,
that res

6.41 Mo
If
do
we

6.5 Ground
If, dur
ground
fire up
is sim
resolve
modifie
receive
not rec
ground
unit
during
Mutual
the bo
and for
clear L

6.6 Overrun
If, dur
movemen
combat.
other u
range o
it occ
entered
other.
they f
fire,
times.
which
combat
restric
the onl
the sam
overrun
are tre
8.1).

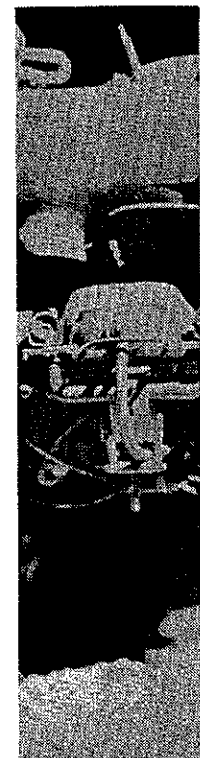
6.7 Opportun
A unit
the op
firing



Each unit
if it fired
the previous
unit may be
simultaneous,
rent phase.

is involves
applicable,
attacks, the
olved in any

the Attack
termines if
n. This is



consult the
l landed.
of shell,
rengths are
cted normal-
taneous with

where the
nce traveled
um range the
led from the
s range is

st determine
unit's armor
and cross
l be either
get unit has
st aside. An
d, and may

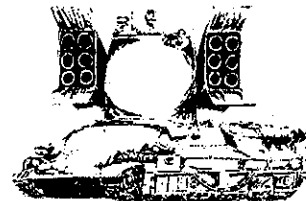
not fire its weapon. (NOTE: This does not exclude an aircraft from firing any mounted weapons. see 7.51). A 'M' result indicates that the unit is immobilized, and may not move for the rest of the game. Aircraft that receive a 'M' result are shot down, and are removed from play. A unit that receives an 'A' or a 'M' result and has already suffered an 'A' or a 'M' result, whether or not it was recieved on this turn, is destroyed. A unit that recieves a '-' result is unaffected by the attack.

6.41 Modifications to the Armor Resistance Chart

If the attacker, during his To Hit roll, rolls a '2' result (ie. double ones) the target is automatically Destroyed. If the attacking weapon is a rocket, then a modifier of one is added to the die roll.

6.5 Ground Units Vs. Aircraft

If, during the Aircraft Ground Attack phase, a ground unit is attacked, that ground unit may return fire upon the attacking aircraft. This return attack is simultaneous with the aircraft attack, and is resolved immediately. The ground unit suffers the modifier for Ground vs. Aircraft, but neither unit receives a modifier for the range. The aircraft does not receive any terrain defensive bonuses, but the ground unit does receive this bonus. If the ground unit in question returns fire, it may not fire again during the current Combat phase, even in an overrun attack. During the Mutual Fire phase, any ground unit may fire at any remaining aircraft on the board. This attacking unit must add the modifier for ground vs. air and for range. It does not add the modifier for terrain. All units have a clear LOS to all ground attacking aircraft.



6.6 Overrun Combat

If, during the Movement phase, a unit moves into an enemy occupied hex, all movement is stopped, and the two units involved immediately conduct Overrun combat. The unit entering the hex is referred to as the attacker, and the other unit is referred to as the defender. The range is found under the 0 range on the Range Modifier chart. The defending unit's terrain is the hex it occupies, and the terrain for the attacker is the hex from which it entered the defender's hex. The units now conduct attacks against each other. As usual, these attacks are simultaneous. If both units survive, they fire again. These attacks continue until both units can no longer fire, one or both units have been destroyed, or until each has fired three times. If both units survive, the attacker must return to the hex from which it entered the defender's hex. These units may not fire during this combat round. During overrun situations, units may, if ammunition restrictions allow, fire during all three combats of the overrun. This is the only time a unit may fire more than once during a combat round. If, in the same movement round, the unit is again overrun, it may not fire. In overrun situations, all 'M' and 'A' results on the Armor Resistance table are treated as 'D' results. All ammunition restrictions are maintained (see 8.1).

6.7 Opportunity Fire

A unit may make an opportunity fire attack if, during the movement phase, the opposing unit moves from one hex that has blocking LOS, into the firing unit's LOS, and ends its movement in a hex that has blocked LOS. All



opportunity fire attacks are declared during the movement phase, and carried out during the current Movement phase. This attack counts toward the limit of one attack per Combat turn. This attack is carried out immediately, before any other movement is conducted, and is at -1. Only the non-moving unit may fire. The moving unit may not opportunity fire. Opportunity fire attacks are always voluntary.

7.0 Aircraft

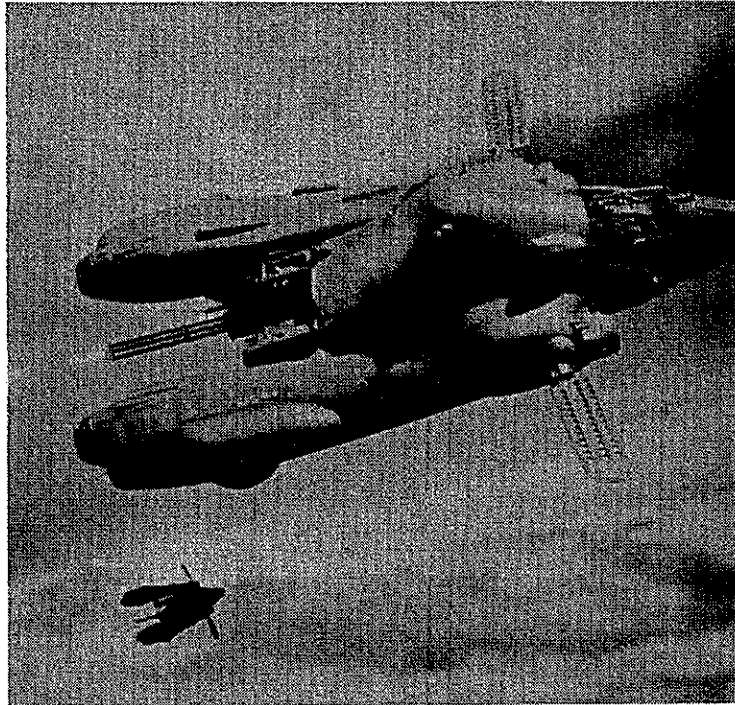
Aircraft are defined as units with a 'P' movement code. These are flying units, capable of flying ground attack, dogfight, and observation missions. The aircraft are the Falke II, and the Salamander.

7.1 Missions

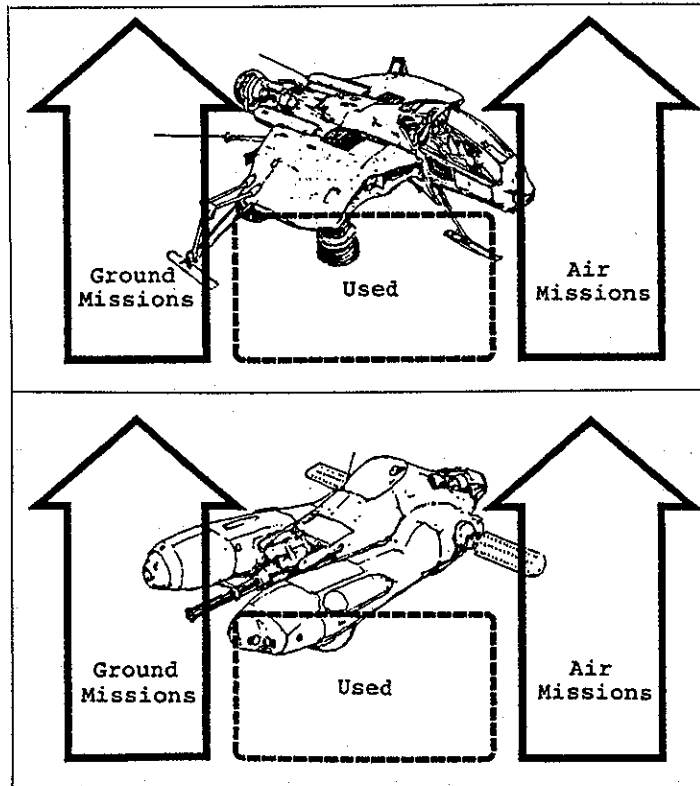
During the Mutual Air Commitment phase, each player may commit his aircraft to ground or air missions. A player may elect whether or not to commit some, all, or none of his aircraft. The units in the air missions section will conduct dogfight missions. The units in the ground mission section will conduct either ground attack or observation missions. The decision regarding which aircraft in the ground missions box will conduct which missions is decided during the Ground Attack phase.

7.2 Dogfighting

During the Dogfight phase of each turn, all of the aircraft in each player's air mission section of the air commitment card must dogfight. Each player totals the dogfight strength of all of its aircraft involved in the fight, and these totals are compared. The player with the highest total is deemed as the attacker (NOTE: if the dogfight strengths are equal, then the player #1 is the attacker.). The total strength of the defender is subtracted from the total of the attacker. This gives the attack strength difference. This gives the column used on the Dogfight chart. A die is rolled, and its result is cross-referenced on the chart. The first number before the



Air Commitment Cards



slash i
loss,
strengt
after
defende
Each s
start w
carry
strengt
not los
loss re
end of
numeric
attack
who is
survivi
phase
opposin
method
ignore

7.3 Observat

Any air
an obse
may no
mission
This ai
unit.
vation

7.4 Ground A

Any un
of the
flying
conduct
attacks
ried on
phase.
as a no
restric
range r
the gro
vs. ai
add the
defendis
LOS on
are sin
returns
unit ne
it attac
number
eligible
the ran
aircraft
over,
phase.

7.5 Special

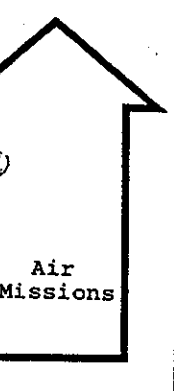
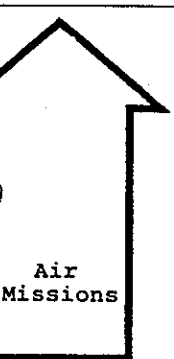
7.51 Ex
Ea
ada
The
wei
wei
wei
fi:
re:
ada
The
of
the

8.0 Special

8.1 Ammuniti

The Gob
a sepa
both it
is used

phase, and
units toward
carried out
-1. Only the
unity fire.



slash is the attackers
loss, in dogfight
strength. The number
after the slash is the
defenders loss.

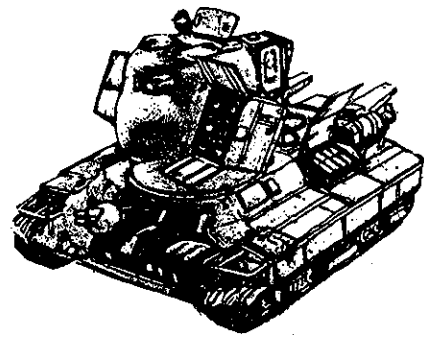
Each side now loses the appropriate amount in dogfight strength. Losses start with the weakest units and work their way up. Excess damage does not carry over. Example: Two Falke II (strength 4 each) suffer a loss of 5 strength. First, one of the Falkes would be destroyed. The second Falke is not lost, for there are not enough remaining points to destroy it. If the loss result was an 8, the Falke would also have been destroyed. If, at the end of the Dogfight phase, one side has a two-to-one superiority, numerically, then some of the dogfighting units may break through and attack the opposing aircraft units in the ground mission box. The player who is able to break through must leave behind at least one unit for each surviving enemy. The rest of the units that were involved in this dogfight phase are free to break through, and thus get a free attack upon the opposing Ground mission aircraft. This attack is resolved using the same method as normal dogfight combat, except that the break through units ignore all attacker losses.

7.3 Observation Missions

Any aircraft in the ground missions box of the Air Commitment card may fly an observation mission. If the aircraft flies an observation mission, it may not also fly ground attack or landing missions. On observation missions, the given aircraft acts as a spotting unit for one ground unit. This aircraft has LOS on any unit on the board, and thus may spot any enemy unit. Units on Observation missions are safe from ground attacks. Observation missions last only one combat turn.

7.4 Ground Attack Missions

Any units in the ground missions box of the Air Commitment card, and not flying an observation mission, may conduct a Ground Attack mission. These attacks are first declared, and carried out, during the appropriate phase. These attacks are carried out as a normal combat, with the following restrictions. Neither unit figures range restrictions for the attack, but the ground unit must use the ground vs. air modifier. The aircraft must add the terrain modifier for the defending ground unit. Both units have LOS on each other, and both attacks are simultaneous. If the ground unit returns fire, this attack counts toward the limit of attacks per combat round unit need not fire. After the attack, the aircraft must remain in the hex it attacked. Aircraft do not count toward the stacking limit of a hex. Any number of aircraft may be in a hex. During the Mutual Fire phase, any unit eligible may fire at the aircraft. All units have LOS on the aircraft, and the range modifiers are applied, as are the ground vs. air modifier. The aircraft does not get any terrain bonuses. When the current combat phase is over, the aircraft are returned to the used box during the aircraft return phase.



7.5 Special Rules for Aircraft

7.5.1 Extra Weapons

Each aircraft may, if specified by the scenario, be armed with additional weapons. These weapons may be missiles, bombs, or lasers. The number listed on the weapon counter is the attack strength of the weapon. If an aircraft uses this extra weapon, it may not fire its own weapon at the same time. Each aircraft can only carry one extra weapon, and bombs and rockets may only be fired once. Lasers may be fired any number of times, and must follow laser rules and restrictions. Lasers also add to the aircraft's dogfight ability, by adding one to the aircraft's dogfight strength.

The attack strength 8 bombs and missiles are rather small, and so two of them may be carried by one aircraft. Both of these must be fired at the same time.

8.0 Special Rules

8.1 Ammunition Restrictions.

The Goblin is armed both with rockets and a laser. In order to show this, a separate counter is provided for the rockets. This unit may not fire both its laser and its rockets in the same turn. After each rocket attack is used, place a Rocket expended counter on the unit. When the unit has

reached its limit, it may make no more rocket attacks. There are other units that also use rockets. These are listed on the Unit Summary Chart, as well as the number of rockets per unit. If a unit armed with a laser rolls an 11 or a 12 on its attack roll, that unit's laser is burned out. An Armament Disabled counter is placed on that unit, and it may no longer fire that weapon. If a unit armed with a MG rolls a 12 on its attack roll, that unit's MG has run out of ammunition. Place an Armament Disabled counter on the unit. That unit may not fire its weapon until it is resupplied. If any unit rolls a 2 on its attack roll, its target is automatically destroyed.

8.2 Special Rules Used in Scenarios

Some scenarios allow one side to have Strong Points. These are non-moving, fortified positions. They add a defensive bonus of -1 or -2, as given in the scenario. This bonus is not given in an overrun situation. In some scenarios, there are objectives that must be found and destroyed. To find if an object is a dummy or a true objective, a unit must move into or through the objects hex. The counter is then immediately turned over. In order to destroy an objective, a unit in the hex must fire at the objective, and it is destroyed. If any enemy unit is in the object hex, the attacking unit may not destroy the object.

8.3 Resupply

If a Depot counter is supplied in a scenario, units may resupply by entering the Depot hex. Depots contain an unlimited amount of PFs, MG ammunition, and vehicle rockets. The unit must remain for one entire combat turn in order to resupply. The Depot is destroyed in the same way as an objective (see above). Any units that are overrun while resupplying may not fire during the overrun.

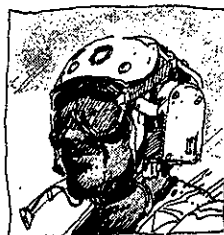
8.4 Raccoon

The Raccoon is a special recon unit, with no combat ability. But, during each combat turn, a Raccoon may either spot two units it has clear LOS on, or spot and target one unit. By targeting a unit, the Raccoon allows all units firing at the target this combat turn a To Hit modifier of +3. A Raccoon may also spot this targeted unit on the same turn. Raccoons may be shocked. (see 9.2) Artillery shots may be targeted.

8.5 Determining Observation Level

The observation level of a given hex is determined by how many people have a clear LOS, and whether or not any units are spotting the hex.

Observation Level	# of spotting units	# of units with LOS	If no units are spotting, # of units with LOS needed
A	1	4	6
B	1	3	5
C	1	2	4
D	1	1	-
E	0	1	-

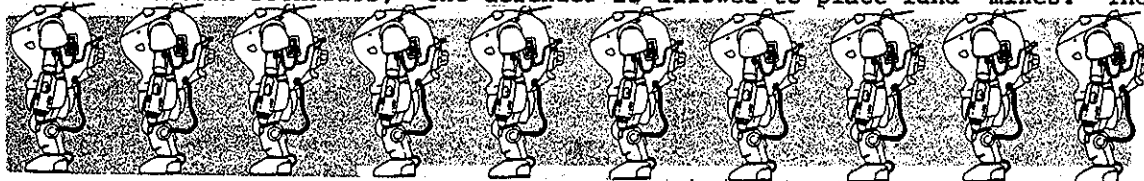


8.6 Computer Operated Units

Some units are controlled by computer, and are not manned. Usually, unless the scenario states otherwise, these units are controlled remotely. If, for some reason, these units are released from control, their on-board computers take over. These computers, while very sophisticated, are not fast enough for combat situations, and therefore the defense strengths are lowered. The Computer Control Chart lists the defense strengths of the units both Under Control and Not Under Control. In some scenarios, it lists a certain unit as the controller. This unit controls the computer units, and if it is destroyed, all computer controlled units are now considered Not Under Control.

8.7 Land Mines

In certain scenarios, the defender is allowed to place land mines. The



locatic
paper.
attack
each to
points.
ground
The uni
defence
include
unit t
Enginee
Another
large
the Ne
reduced
goes o
hex it
a stre
in.

8.8 Infantry
Each I
types o
company
HQ and
squad
tionist
follow
8.81 In

I
t
a
e
i
m
t
t
D
P
r
t
C
E
a
k
m
t
n
i
h
f
u
n
f

8.82 He

I
A
a
F
u
i
r
h

8.83 Er

E
c
a
k
n
e
n
c
f
t

are other
mary Chart,
th a laser
urned out.
y no longer
ttack roll,
t Disabled
t is resup-
automatical-

non-moving,
as given in
In some
d. To find
into or
over. In
the objec-
hex, the

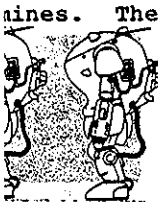
supply by
PFs, MG
one entire
the same way
resupplying

but, during
ar LOS on,
allows all
of +3. A
ons may be

people have



ly, unless
otely. If,
on-board
l, are not
strengths
ths of the
arios, it
computer
are now



location of the mines is recorded, in secret, on a separate piece of paper. The amount of mines that may be placed is presented in the form of attack strengths. This attack strength is divided up into separate mines, each totaling anywhere from 5 attack strength points to 13 attack strength points. Each mine may be placed in any one non-building hex. Whenever any ground unit, of either player, enters the mined hex, the mine goes off. The unit in question is immediately attacked at the listed strength. The defence strength of the unit, and any terrain modifiers (bomb column) are included. Once the mine has gone off, the hex is clear. The only ground unit that can enter a mined hex with a chance of avoiding the mine is an Engineer unit (See Below).

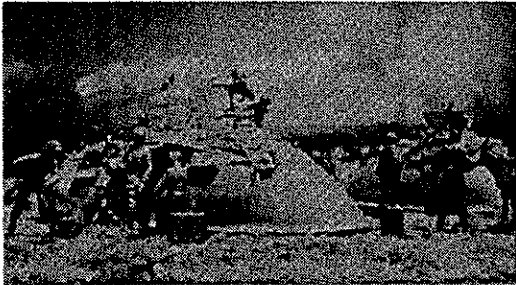
Another type of mine is the AMU (Advanced Munitions Unit). The AMU is a large bundle of explosives that can be carried by the Krachenvogel (and the Neuspotter.). Any unit carrying the AMU has its movement allowance reduced by 10. The AMU may be dropped during any movement phase, and it goes off during the next Mutual Fire phase. It attacks all units in the hex it was dropped at a strength of 20, and all units in adjacent hexes at a strength of 10. AMUs will be listed in the scenario that they are used in.

8.8 Infantry and Trucks.

Each Infantry counter represents a squad of 8-10 men. There are five types of infantry squads in the game. These are standard infantry platoon HQ, company HQ, Anti A.F.S. Rifle (AAR), and engineers (Eng. or Pnr.). Platoon HQ and Company HQ are the commanders for their respective units, AAR squads are laser armed infantry, and engineers are engineers and demolitionists. A few special rules are used for infantry, otherwise, they follow normal ground unit rules.

8.81 Infantry Morale

If an infantry unit rolls an 'M' or an 'A' result on the armor resistance chart, the unit now has its Morale Broken, and a morale broken counter is placed on the unit. There are several effects of broken morale. The unit in question cannot attack, except in overrun combat. The broken unit cannot spot, and, during its movement phase, moves toward and stays in the nearest LOS blocking terrain (if there are two or more LOS terrains equal distant from the unit, determine randomly which hex the unit moves toward.). During the Morale Recovery Phase, the phasing player rolls one die for each of their units that are broken. On a roll of 1-4, the Morale Broken counter is removed. On a 5 or 6, the unit remains broken. There are several modifiers to this roll. If the unit is adjacent to a non-broken unit, the modifier is -1, if the unit is in LOS blocking terrain, the modifier is -2, and if an enemy unit is within 3 hexes, the modifier is +2. These modifiers are cumulative.



8.82 Headquarters

In general, a platoon consists of 4 infantry, engineer, and/or AAR squads, plus the platoon HQ. A company consists of two platoons and a company HQ. This is not solid, but should be stuck to if possible in the scenario. If a platoon HQ is destroyed, all of the units in that units' platoon are immediately broken. If a company HQ is destroyed, all of the units in the company are broken. When retreating units off board, the HQ must be the last unit off the board.

8.83 Engineers

Engineers are special units that have special abilities above their combat ability. There are two special abilities. The first is the ability to detect and disarm landmines. When an engineer enters a hex that it believes is mined, it may roll one die. On a 1-5, the mine, if it is there, is disarmed. On a 6, the mine goes off. An engineer may not fire on the same turn it searches for mines, nor may it have been transported by a truck. The other ability is to destroy bridges (and other structures, see scenario). It takes two full turns to destroy a bridge. If the engineer is destroyed before the bridge is, the bridge is not destroyed. A second Engineer may

finish the Demolition. Any unit on the bridge at the end of the movement phase is destroyed, and that bridge may no longer be used. An engineer may not attack when destroying a bridge.

8.84 Trucks

Trucks and Kraftwagens are designed primarily for carrying infantry. One truck may carry 2 infantry units at a time. Infantry may offload from trucks at any time during the movement phase. Infantry may onload onto a truck if they start the movement phase in the same hex as the truck. The trucks movement points are reduced by 3 for that phase. If a truck is destroyed while carrying infantry then the infantry are also destroyed.

8.85 Heavy Machine Guns

Heavy Machine Guns (HMG) are crewed weapons used by a squad of infantry. They increase the attack strength by one, and increase the range by two. HMG cannot be used by AAR squads. Some combats occur at night, which will be stated in the scenario. Most units, because of their sensors, are not affected by night. But infantry are affected by night, and the modifiers are listed on the To Hit Modifier Chart.

S.F.3.D

ORIGINAL

8.9 Units Armed With Smoke

Some units carry smoke rounds that may be used instead of normal rounds. These units are listed on both the Unit Summary Chart, and the Smoke Chart. The Smoke Chart lists the number of smoke rounds the unit has, the range (in hexes) that the smoke can be fired, and the duration. If a unit wishes to fire smoke, it does so during its own Mutual fire phase, and may not fire any other weapon during that phase.

9.0 Optional Rules

The following are optional rules. They are not necessary for play, but they add to the flavor of the game. Any or all of these rules may be used.

9.1 Stacking

More than one friendly unit may now occupy a given hex. The stacking limits are as follows. No more than four aircraft may occupy a single hex. All ground units have a stacking size. This size is the unit class number. There cannot be more than four class numbers in a single hex (ie. four class I, or two class II, or one class II and two class I etc.). If an attacker is firing into a hex that contains more than one unit, The attacker singles out one unit as its target, and conducts fire normally. If the attacker's weapon is a Rocket, Bomb, or Missile, the non-targeted units in the hex suffer spillover fire. The units suffering spillover fire are each attacked separately, with a modifier of -2.

9.2 Shock and Panic

If, at any time, a unit is hit by an attack, whether or not the attack penetrates the units armor, that unit is shocked. A unit is also shocked if three or more attacks are resolved against the unit in one turn, whether or not these attacks successfully hit. Only unit class I units may be shocked. Shocked units may carry out no actions until the shock is released. Any simultaneous attacks may be conducted. P.K.A.s and Gustavs are not affected by shock if they are attached to a PK 41.

9.3 Recovery From Shock

At the beginning of each Combat Phase, all shocked units must roll to recover from shock. The owning player rolls a single die. If the result is a 1, 2 or 3, the unit's shock has been released, and the unit may now conduct actions freely. If the result is a 4 or 5, the unit remains shocked, and may conduct no actions this Phase. If the result is a 6, the

unit pa
(see bel
9.4 Panic
If a uni
below, a

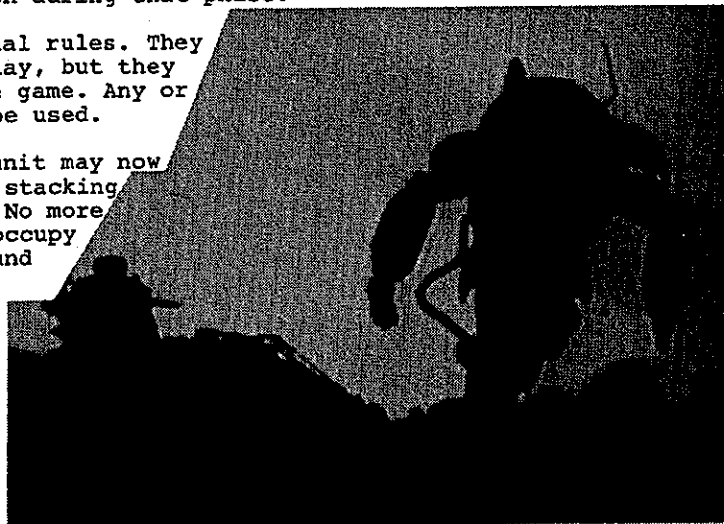
Die
Roll
1

2,3

4

5

6



9.5 Pilots.
There are
begins,
Hornisse
dogfight
number
dogfight
strength
strength

9.6 Fire
If the f
before
Spread c
spreadin
fired at
more, a
is star
downwind
adjacent

nd of the
er be used.

g infantry.
may offload
fantry may
he same hex
3 for that
then the

squad of
ncrease the
mbats occur
ts, because
fantry are
o Hit Modi-

al rounds.
moke Chart.
the range
a unit
se, and may



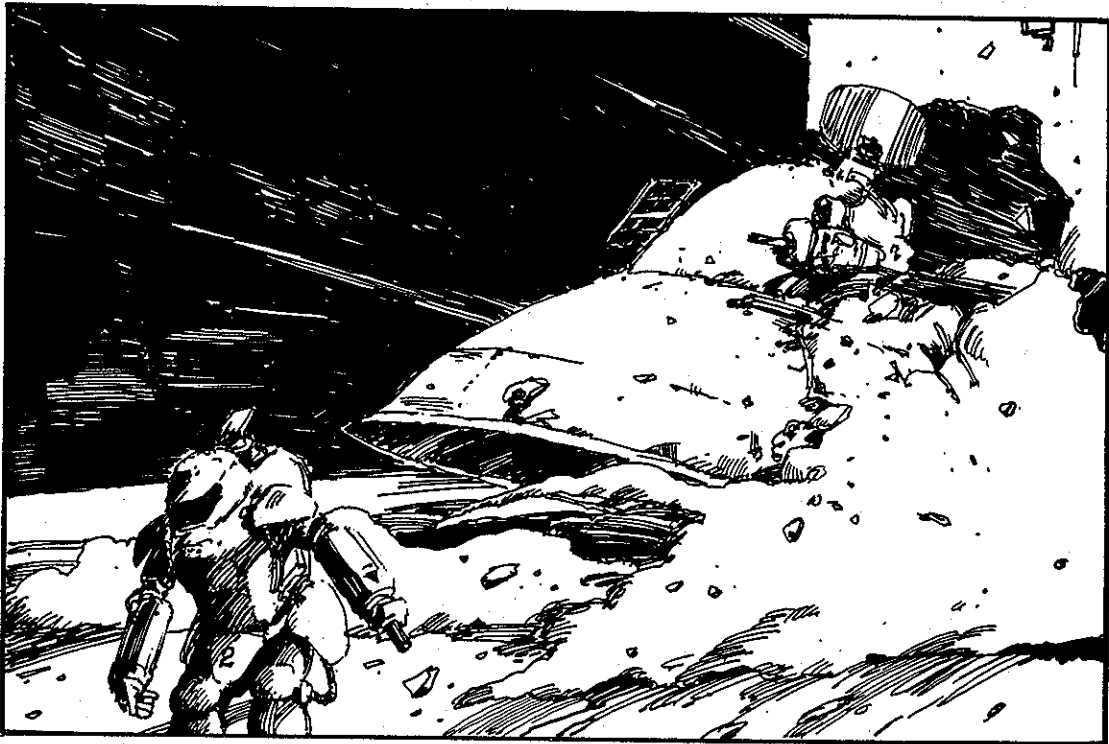
ngles out
acker's
in the hex
are each

the attack
shocked if
whether or
be shocked.
eased. Any
ot affected

st roll to
e result is
unit may now
it remains
is a 6, the

unit panics, and the result of the unit's panic is re solved immediately (see below).
9.4 Panic
If a unit panics, one die is rolled. The effects of the panic are listed below, and resolved immediately.

Die Roll	Result
1	Unit recovers and is free to conduct actions this Phase.
2,3	Unit moves towards the nearest cover(ie a hex that contains LOS blocking terrain) and remains shocked.
4	Unit moves toward the nearest enemy unit and attempts to overrun. This unit is no longer shocked, but may not conduct any other action this Phase.
5	Unit does not move now, and fires at the nearest unit (whether they are friend or foe). This unit remains shocked.
6	Unit's pilot makes a fatal error in suit control. Suit explodes (unit is eliminated). All other units in the same hex as the exploding unit are attacked at an strength of 7 (less any modifiers) Resolve damage immediately.



9.5 Pilots.
There are several pilot counters supplied in the game. Before the scenario begins, the player randomly assigns one pilot to each aircraft. P.K. 41 Hornisse are not assigned pilots. Each counter lists the name, rank, dogfight bonus, ground attack bonus, and defense bonus of the pilot. If the number is white, the bonus is negative. The first number is added to the dogfight strength of the unit, the second number is added to the attack strength of the unit, and the third number is added to the defensive strength of the unit.

9.6 Fire
If the fire optional rules are used, the wind direction must be determined before the scenario begins. Determine this by rolling on the Artillery Spread chart. The wind direction is used to determine the direction of fire spreading, and where the fire produces smoke. Whenever a laser weapon is fired at or through a forest hex, two dice are rolled. If the total is 7 or more, a fire is started, and a counter is placed in that hex. When a fire is started, three smoke counters are placed. one counter is placed downwind, and the other two are placed on both sides of the first smoke, adjacent to the fire hex. These smoke counters always remain. During the

Initiative Determination phase, player #1 rolls two dice for each hex that contains a fire. If the result is a 5 or less, the fire (and any smoke associated with it) is removed. If the result is 10 or more, the fire spreads to one of the three smoke hexes, determine randomly. Any unit passing through or stopping in a hex containing fire is attacked with a strength of 8. Range and terrain modifiers do not apply. NOTE: Infantry in a fire hex have a defense strength of 0.

9.7 Miscellaneous Rules.

P.K.A.s are allowed to fire both of their PFs on one turn if the attacks are on the same target. Gustavs are allowed to carry a P.K.A. grenade launcher. Each Gustav carries 2 PFs, and fires these at the same attack strength and range as the P.K.A.. All destroyed Class II units are left on the map as wreckage. Wreckage blocks LOS, and each destroyed unit in a hex adds one movement point to the cost of the hex. Aircraft cause no wreckage. Class II units may now enter buildings. Each hex costs 5 Movement Points to enter (This simulates the tanks breaking through the wall to get at the annoying little suits).

10.0 Combining SF3D II with SF3D

In order to combine SF3D with this game, these rules are used, rather than SF3D I. Additionally, SF3D I has special rules pertaining to certain units, such as the Neuspotters, and the Hornisse. These rules are to be used. The Charts contained in this game include all of the units from the first game.

11.0 Scenarios

These instructions for the scenarios are to be used with the Japanese scenarios in the Scenario booklet. The map configurations are given in the booklet, as are the orders of battle. The German troops are contained in the first box, the Australians are in the bottom box, and are usually divided into two or more groups. These groups are referred to as Group 1, Group 2, etc. and are numbered left to right, top to bottom. Special rules and Victory conditions are listed here. If the scenario refers to the Standard Victory Conditions, that means each side receives the victory points listed on the Unit Summary Chart. An immobilized unit is worth half the victory points.

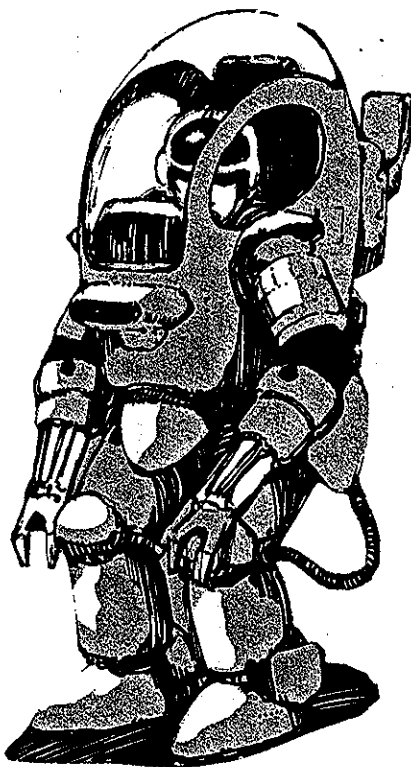
#11 Flare Furmer

A German Infantry platoon is escorting supplies through a rear area when it is attacked by a small breakthrough force.

German group 1 enters the map on the road containing hex 0914. All of the infantry and the three depots must start in the trucks. The depots may not leave the truck, and count for one infantry squad when in trucks. German group 2 is an Artillery attack that begins on turn 8, from the south edge, it has traveled 60 hexes. There are four attacks, and up to four attacks may be made per turn. They are type I shells. Australian group 1 enters the map on the north edge, west of hex 1600. The Australian player gets 30 pts. of mines to be placed anywhere except the road. Australian group 2 enters the map on turn 3, on the north edge. The German player must get two of the depot trucks off the east edge of the map. If the German player fails in this, the German player must destroy 2 times the VP in enemy units than it loses. The Australians must stop this, and may retreat off of the north edge. This game lasts 8 turns.

#12 Fire Fight

This is a typical firefight between units during the Australian conflict. German group 1 enters the map on turn 1, on the north edge, east of hex 1801. One of these units is a controller. German group 2 enters on turn 4, on the north edge, east of hex 1900. German artillery starts on turn 5, on the north edge, traveled 100 hexes. There are 10 rounds, up to two may be fired per turn. They are fired from Sphinx, Attack 16, range 120, Rockets. Australian group 1 enters the map on turn 1, on the south edge, west of hex 1214. Australian group 2 enters the map on turn 3, on the south edge. Australian artillery starts on turn 1, on the south edge, traveled 60 hexes. There are 20 rounds, up to two may be fired a turn. They are type II



shells.
hexes 1:
scenario
#13 Militia I
The 12th
Regiment
6. Each
the Konr
group 1
3 start
player
edge of
stored.
is dest
worth 6
#14 Canadian
Because
began
started
usual, t
on the
lers. (0
0914. 2
5. Gro
wishes t
lose 10
hexrow
edge map
east edge
One ob
east edge
types, c
and PzKw
east edge
This gam
#15 Airborne
The 18th
Airbase.
anywhere
same to
Australi
units at
building
empty t
German
who has
#16 The Resc
Major Pi
surprise
for a
starts
Australi
group 2
Australi
rounds,
Australi
POW. If
Australi
the POW.
playtest
that he
#17 Battles W
The city
war. Th
starts
enter c
Konrads
map 1.
Germans
get Arti
II, Wes
edge, t
the map

ach hex that
any smoke
the fire
ny unit pas-
ked with a
Infantry in

the attacks
.A. grenade
same attack
are left on
nit in a hex
t cause no
s 5 Movement
wall to get

rather than
rtain units,
be used. The
first game.



n conflict.
east of hex
s on turn 4,
n turn 5, on
o two may be
20, Rockets.
west of hex
south edge.
traveled 60
are type II

shells. To win, at the end of the turn, one player must control three of hexes 1509, 1612, 1711, 1811, 2209. This scenario is a draw otherwise. This scenario lasts 10 turns.

#13 Militia Holds the Line

The 12th Militia attempts to fend off the assault of the 134th Armored Regiment. German group 1 enters the map on turn 1, on the west edge of map 6. Each Konrad has 2 PFs as well as its laser (Attack 10, Range 4). One of the Konrads is the controller. German group 2 enters on turn 4. Australian group 1 starts anywhere on map 6. Group 2 starts on map 5. Australian group 3 starts on turn 3, at an unknown location. On turn 3, the Australian player rolls one die. If the result is 1-2, east edge of map 5, 3-4, south edge of map 5, 5-6, east edge of map 6. Each Pak Krote and Makel have 2 PFs stored. A Konrad must spend 2 MPs to get them. If the Australian Platoon HQ is destroyed, all infantry on map 6 must retreat to map 5. The Depot is worth 6 VP. High VP total wins.

#14 Canadian Invasion

Because of the victories of the Rebel Mercenaries, many of the new colonies began to think of rebellion. In order to stop this, The German command started an invasion of Canada, the most rebellious of the colonies. As usual, the Australians were already there. German group 1 enters on turn 1, on the south edge of map 6, west of 0914. Two of the Konrads are controllers. German group 2 enters on turn 2, on the south edge of map 6, west of 0914. Australian group 1 starts on map 6. Australian group 2 starts on map 5. Group 3 may start on turn 3, on the east edge of map 5, if the player wishes to lose 20 VP. Group 4 may enter on turn 6, if the player wishes to lose 10 VP. The Australians get 140 pts of mines to place anywhere east of hexrow 13XX of map 6. On turn 2, the Australians get artillery: From east edge map 5, traveled 42 hexes, 14 rounds, 3 per turn, Type I shells. From east edge map 5, traveled 60 hexes, 6 rounds, 1 per turn, Type II shells. One object counter may be carried per truck. Each truck retreated off of east edge of map 5 is worth 10 VP. The entire map is snow-covered. All 'W' types, except Krote, have 3 MP, all 'C' types, except Green Buffalo, Ravin, and PzKw 182, have 4 MP. The Germans win if they retreat 100 VP off of the east edge of the map, or if they are ahead of the Australians by 25 VPs. This game lasts 20 turns.

#15 Airborne Raid

The 18th Airborne was dropped behind the lines in order to raid McCormick Airbase. German group 1 is airdropped into the area. They may be placed anywhere on the map that they are able to enter, and may not fire on the same turn that they land. Australian group 1 starts anywhere on the map. Australian group 2 enters the north edge of the map starting on turn 2, two units at a time. The player may choose which two appear each turn. The six buildings on hexrow 24XX are hangers. They have a defense of 5, and must be empty to attack. If they are hit, they are automatically destroyed. The German player gets 10 VP each. The winner of this scenario is the player who has 10 more VP than the opponent. This scenario lasts 10 turns.

#16 The Rescue of Major Pierce

Major Pierce, commander of the 44th A.F.S. Battalion, was captured in a surprise attack on the 44th's base. The 90th All Mercenary company went in for a rescue. German group 1 starts anywhere on map 7. German group 2 starts anywhere on map 6. The POW counter is placed anywhere on map 7. Australian group 1 enters on turn 1, the east edge of map 6. Australian group 2 enters on turn 5, the east edge of map 6. On turn 2, the Australians get artillery. From east edge of map 6, traveled 70 hexes, 12 rounds, 1 per turn. The shells are type II. The F-Boots have no smoke. Any Australian unit that moves into the hex containing the POW may pick up the POW. If the unit carrying the POW is Destroyed, The POW is killed. The Australians get 10 VP for the POW. The German player may not move or kill the POW. The higher VP total wins. This scenario lasts 15 turns. (Note: Our playtesters noticed that the POW was worth very few VP, and recommended that he be worth 30 VP, and not be killable, instead abandoned KH).

#17 Battles Won and Lost

The city of Bedford became the sight of one of the bloodiest battles of the war. The Germans dug in, and the Australians dug them out. German group 1 starts anywhere west of hexrow 22XX on maps 1 and 7. German group 2 may enter on turn 6. Before this group arrives, roll one die. On 1-2, the Konrads are not accompanied by the Hornisse, and enter on the west edge of map 1. If German group 2 enters the game, the player loses 10 VP. The Germans get 100 pts. of mines to be placed anywhere. On turn 2, the Germans get Artillery: west edge, traveled 80 hexes, 15 rounds, 2 per turn, Type II, West edge, traveled 200 hexes, 6 rounds, 2 per turn, Type III, West edge, traveled 80 hexes, 6 rounds, 2 per turn. Australian group 1 enters the map on turn 1, on the east edge of the boards. Group 2 enters on turn

3, east edge; group 3 enters on turn 6, east edge; group 4 enters on turn 9, east edge; and group 5 enters on turn 12. The buildings containing hex 1106 on map 7 and hex 1307 on map 1 are worth 30 VP each if one player is the only player with units in the building. High VP total is the winner. This scenario lasts 15 turns.

#18 Stop Them at Colonier

The 711th A.F.S. Battalion began moving toward La Grange spaceport, where mercenary units were collecting for an assault. The city of Colonier was ordered to stop the 711th. German group 1 sets up anywhere east of hexrow 07XX on map 6. German group 2 sets up anywhere on map 5 or 6. The infantry is a controller. Australian group 1 enters on turn 1, west edge of map 6. The Australians must retreat 40 VP worth of units off of the east edge of the board, or gain 2 time the VP of the German player. The German player must stop this. This scenario lasts 15 turns.

#19 Hill 91

Hill 91 was a high-point occupied by the controller of the 17th Automated Company. The 331 AFS Company was ordered to take the hill. German group 1 sets up anywhere on either map. The infantry squad is the controller. Australian group 1 enters on turn 1 on the north edge of map 4. The Australians win if they have a unit on the hill, Hex 2205, map 6 at the end of the game. This scenario lasts 10 turns.

#20 Prologue to "Faserei"

One of the opening battles of Operation Faserei, the final resistance of the now cut-off German invasion force in Canada. German group 1 sets up anywhere within 16 hexes of the east edge. German group 2 enters on turn 4. Group 3 may enter on turn 6, and is airdropped. These units may be placed anywhere it is possible for them to enter. These units may not fire on the turn they are placed. The player loses 5 VP if these are used. Australian group 1 is placed anywhere on maps 2 or 4. Group 2 may enter on turn 3, from the west edge. The player loses 5 VP if these are used. Group 3 enters on turn 5. The Australians have artillery: West edge, traveled 60 hexes, 15 rounds, 2 per turn, Type II shells; West edge, traveled 100 hexes, 10 rounds, 2 per turn, Type III shells. Three of the German object counters are real. Each real object destroyed is worth 15 VP. The highest VP wins. This scenario lasts 15 turns.

#21 Operation Faserei

The German invasion force had pulled back into the Alberta area. They were surrounded and attacked. German group 1 begins anywhere on maps 1, 5, and 7. Three of the Gustavs are controllers. All of these Konrads and Gustavs have 2 PFs. German group 2 enters on turn 3. German group 3 enters on turn 9, on the east edge of maps 1, 5, and 7. The Germans get 280 pts of mines on maps 3, 4, 5, and 6. The Germans get artillery on turn 1: From the east edge, traveled 70 hexes, 30 rounds, 2 per turn, Type II shells; East edge, traveled 150 hexes, 10 rounds, 1 per turn, Type III shells; East edge, traveled 65 hexes, 15 rounds, 3 per turn, Type IV RM shells. Australian group 1 enters on the west edge, and on the north edge of map 6. Group 2 enters on turn 4, on the west edge, and on the north edge of map 6. Group 3 enters on turn 6, on the north edge of map 5, or on the south edge of map 4, player's choice. The Australians get artillery: From the west edge, traveled 60 hexes, 40 rounds, 2 per turn, type II shells; on the west edge, traveled 100 hexes, 6 rounds, 1 per turn, Type III shells; on the west edge, traveled 4 hexes, 5 rounds, 2 per turn, Dollhouse rockets. If there are no mobile German ground units on any of the boards at the end of the game, the Australian player gets 20 VP. The Germans may retreat units off of the East edge of the map. To win this scenario, a player must have 20 more VP than their opponent. This game lasts 30 turns.

#22 After The Holocaust

The 192 Panzer Company, one of the few units left relatively intact, had been chased across Canada into Ontario. While waiting for their ship, their camp was attacked. The scouts of the 192 returned, to find the enemy dug in. German group 1 starts anywhere on map 5. The Gustavs have 2 PFs, and one of the Nut Rockers is a controller. German group 2 enters on turn 1, from the west edge of map 4. One Nut Rocker II is a controller. The German player gets 100 pts of mines anywhere on map 5. Australian group 1 starts anywhere on maps 3, 4, and 6. Both the Company HQ and the Schenkel are Company HQs, and both must be destroyed before the effects of destruction of an HQ occur. The Australians get 240 pts of mines to be placed anywhere on maps 3, 4, and 6. The Australian gets Artillery: from the north edge, traveled 72 hexes, 4 rounds, 2 per turn, Dollhouse rockets. On turn 13, the Germans may begin to retreat units off of the east edge of map 5. Any units that leave the map before then, or any German units left on the map after turn 16 are considered destroyed by the Australian player, and count for VP. The winner is the player with the most VP. This scenario lasts 16 turns.

S.F.3

ORIGIN

ized by Mr. to be the craze being Yokoyama cr realistic se art and the model kits the SF3D Gam Hobby Jay well as rel Edition of used the Hobby Japan

ters on turn
attaining hex
e player is
the winner.

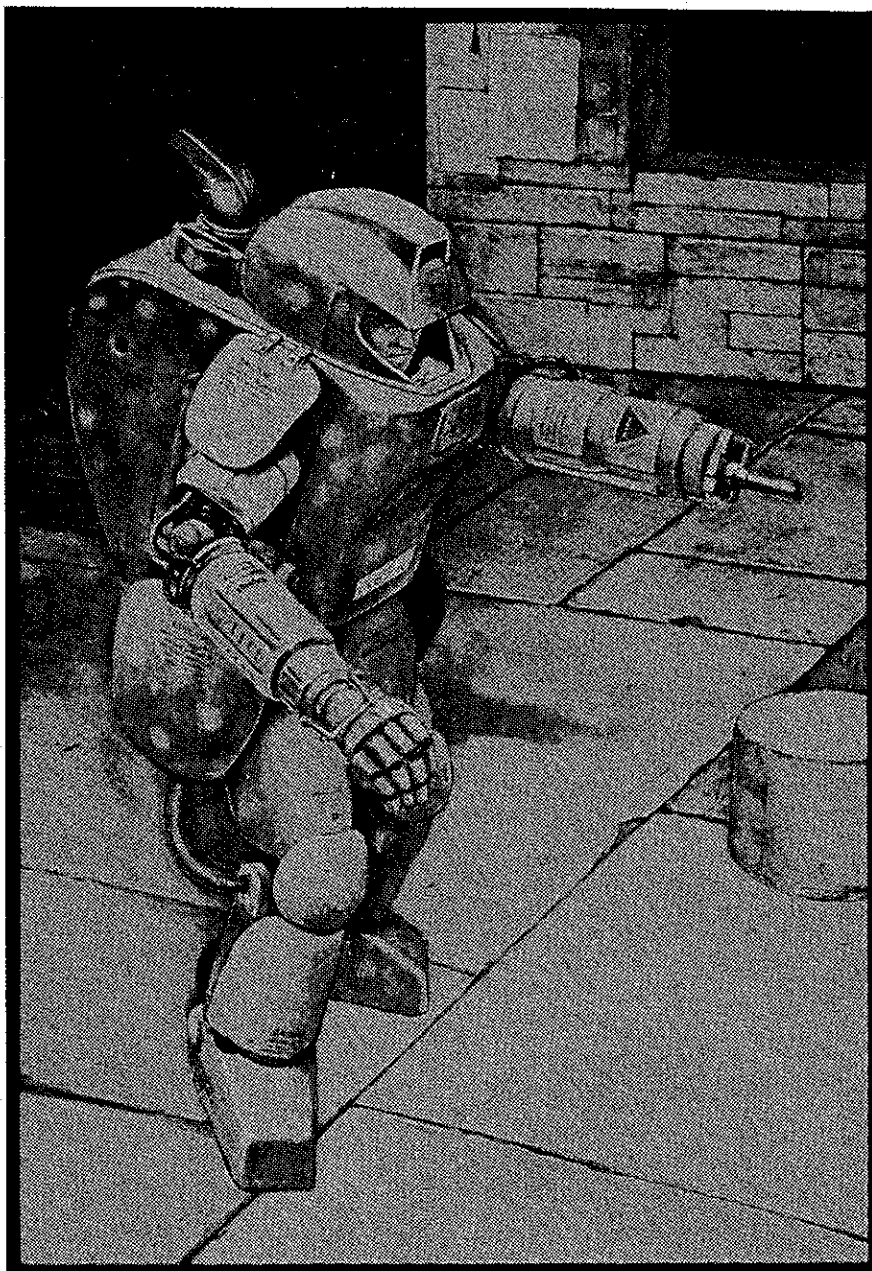
port, where
olonier was
t of hexrow
The infantry
ge of map 6.
ast edge of
erman player

Automated
rman group 1
controller.
map 4. The
6 at the end

sistance of
p 1 sets up
s on turn 4.
ay be placed
fire on the
Australian
on turn 3,
cup 3 enters
60 hexes, 15
hexes, 10
act counters
est VP wins.

. They were
s 1, 5, and
and Gustavs
ters on turn
pts of mines
rom the east
; East edge,
East edge,
Australian
6. Group 2
p 6. Group 3
ge of map 4,
west edge,
e west edge,
on the west
ts. If there
end of the
eat units off
ust have 20

intact, had
ship, their
he enemy dug
2 PFs, and
on turn 1,
. The german
up 1 starts
chenkel are
destruction
ced anywhere
north edge,
turn 13, the
5. Any units
e map after
d count for
o lasts 16



S.F.3.D

ORIGINAL Was conceptual-
ized by Mr. Ko Yokoyama, in 1984,
to be the answer to Japan's SF
craze being too fantasy-oriented.
Yokoyama created a graphically
realistic setting in his writing,
art and the scratch-built plastic
model kits he made, as well as in
the SF3D Game Series.

Hobby Japan made the games, as
well as released a special SF3D
Edition of their magazine, and
used the art and storyline in
Hobby Japan Magazine. Nitto of

Japan made the plastic model kit
series, which has since won many
awards for detailing, scale and
realism.

TCI stocks the complete line
of SF3D items. For more informa-
tion just write us. Send \$2 for a
complete catalog.



unit eligible may fire at the aircraft. All units have LOS on the aircraft, and the range modifiers are applied, as are the ground vs. air modifier. The aircraft does not get any terrain bonuses. When the current combat phase is over, the aircraft are returned to the used box during the aircraft return phase.

7.5 Special Rules for Aircraft

7.51 Extra Weapons

Each aircraft may, if specified by the scenario, be armed with additional weapons. These weapons may be missiles, bombs, or lasers. The number listed on the weapon counter is the attack strength of the weapon. If an aircraft uses this extra weapon, it may not fire its own weapon at the same time. Each aircraft can only carry one extra weapon, and bombs and rockets may only be fired once. Lasers may be fired any number of times, and must follow laser rules and restrictions. Lasers also add to the aircraft's dogfight ability, by adding one to the aircraft's dogfight strength.

7.52 PK 41 Hornisse

The PK 41 counter is not an Aircraft unit. Only when it is combined with a P.K.A. or a Gustav does it become an aircraft. These two counters fly, attack, and defend as one unit. They use the stats for the PK 41 counter, and if the aircraft is destroyed, both counters are removed. The PK 41 Hornisse is the only unit that may fly landing missions. The aircraft lands during the ground attack phase, but may not conduct ground attacks during that phase. The PK 41 may only land on Clear hexes. These hexes may not contain units, Friendly or Enemy. The P.K.A. or Gustav may not conduct any actions this turn. At the beginning of the next combat turn, the P.K.A. or Gustav is free to conduct actions. The PK 41 may conduct no action until it is reconnected with a P.K.A. or Gustav. The unit attempting to reconnect with the PK 41 does so during the mutual fire phase, rather than conducting an attack. During the next aircraft return phase, the PK 41 Hornisse is moved to the used box.

8.0 Special Rules

8.1 Ammunition Restrictions.

The Dollhouse Vehicle is armed both with rockets and a laser. In order to show this, a separate counter is provided for the rockets. This unit may not fire both its laser and its rockets in the same turn. The number of rocket attacks each Dollhouse has is listed below. After each rocket attack is used, place a Rocket expended counter on the unit. When the unit has reached its limit, it may make no more rocket attacks. There are other units that also use rockets. These are listed below. All units that use rockets may only fire one rocket per Combat turn.

Dollhouse.....4 Rockets

Sphinx.....5 Rockets

Oscar.....2 Rockets

The P.K.A. unit uses a special rocket launcher (the PF). Although it uses a special column on the Terrain Effects

SE3D ORIGINAL

Chart, it suffers the same ammunition restrictions as other rockets. (NOTE: on the Armor Resistance chart, the PF is not a Rocket).

P.K.A.2 PF

If a P.K.A. starts the Combat turn adjacent to any other P.K.A., it may give its PF's to the other unit. If a unit armed with a laser rolls an 11 or a 12 on its attack roll, that unit's laser is burned out. An Armament Disabled counter is placed on that unit, and it may no longer fire that weapon. If a unit armed with a MG rolls a 12 on its attack roll, that unit's MG has run out of ammunition. Place an Armament Disabled counter on the unit. That unit may not fire its weapon until it is resupplied. If any unit rolls a 2 on its attack roll, its target is automatically destroyed.

8.2 Special Rules Used in Scenarios

Some scenarios allow one side to have Strong Points. These are non-moving, fortified positions. They add a defensive bonus of -1 or -2, as given in the scenario. This bonus is not given in an overrun situation. In some scenarios, there are objectives that must be found and destroyed. To find if an object is a dummy or a true objective, a unit must move into or through the object's hex. The counter is then immediately turned over. In order to destroy an objective, a unit in the hex must fire at the objective, and it is destroyed. If any enemy unit is in the object hex, the attacking unit may not destroy the object.

8.3 Resupply

If a Depot counter is supplied in a scenario, units may resupply by entering the Depot hex. Depots contain an unlimited amount of PFs, MG ammunition, and vehicle rockets. The unit must remain for one entire combat turn in order to resupply. The Depot is destroyed in the same way as an objective (see above). Each PK 41 contains two PFs, and may resupply P.K.A.s in the same hex.

8.4 Neu Spotters

The Neu Spotters are a special recon unit, with no combat ability. But, during each combat turn, a Neu Spotter may either spot two units it has clear LOS on, or spot and target one unit. By targeting a unit, the Neu Spotter allows all units firing at the target this combat turn a To Hit modifier of +3. A Neu Spotter may also spot this targeted unit on the same turn. Neu Spotters may not be shocked (see 9.2).

9.0 Optional Rules

The following are optional rules. They are not necessary for play, but they add to the flavor of the game. Any or all of these rules may be used.

9.1 Stacking

More than one friendly unit may now occupy a given hex. The stacking limits are as follows. No more than four aircraft may occupy a single hex. All ground units have a stacking size. This size is the unit class number. There cannot be more than four class numbers in a single hex (ie. four class I, or two class II, or one class II and two class I etc.). If an

other units in the same hex as the exploding unit are attacked at an strength of 7 (less any modifiers) Resolve damage immediately.



9.5 Pilots.

There are several pilot counters supplied in the game. Before the scenario begins, the player randomly assigns one pilot to each aircraft. P.K. 41 Hornisse are not assigned pilots. Each counter lists the name, rank, dogfight bonus, ground attack bonus, and defense bonus of the pilot. If the number is white, the bonus is negative. The first number is added to the dogfight strength of the unit, the second number is added to the attack strength of the unit, and the third number is added to the defensive strength of the unit.

9.6 Miscellaneous Rules.

P.K.A.s are allowed to fire both of their PFs on one turn if the attacks are on the same target. Gustavs are allowed to carry a P.K.A. grenade launcher. Each Gustav carries 2 PFs, and fires these at the same attack strength and range as the P.K.A.. All destroyed Class II units are left on the map as wreckage. Wreckage blocks LOS, and each destroyed unit in a hex adds one movement point to the cost of the hex. Aircraft cause no wreckage. Class II units may now enter buildings. Each hex costs 5 Movement Points to enter (This simulates the tanks breaking through the wall to get at the annoying little suits).

10.0 Scenario Cards

These instructions for the scenarios are to be used with the Japanese scenario cards. The map configurations are given on the cards, as are the orders of battle. The German troops are contained in the blue box, the Australians are in the green box, and are usually divided into two or more groups. These groups are referred to as Group 1, Group 2, etc. and are numbered left to right, top to bottom. Special rules and Victory conditions are listed here. If the scenario refers to the Standard Victory Conditions, that means each side receives the destroyed unit's defence strength in victory points. An immobilized unit is worth half the victory points.

#1 Operation: Search Party

A German frontal assault upon the area HQ, which has recently been reinforced by two platoons of S.A.F.S.s. German group 1 starts in the air, German group 2 enters on any 1 board edge on any 1 turn. Australian group 1 may set up anywhere. 3 of the 5 object counters are dummies. The five object counters must be set up in buildings. Each object counter must be within 3 hexes of at least one other object counter. Victory Conditions: The Germans must destroy both 'D' object counters. The Australians are to prevent this. This scenario lasts 10 turns.

#2 Rescue 34th A.F.S. platoon

The 34th A.F.S. platoon is caught by surprise during a rest

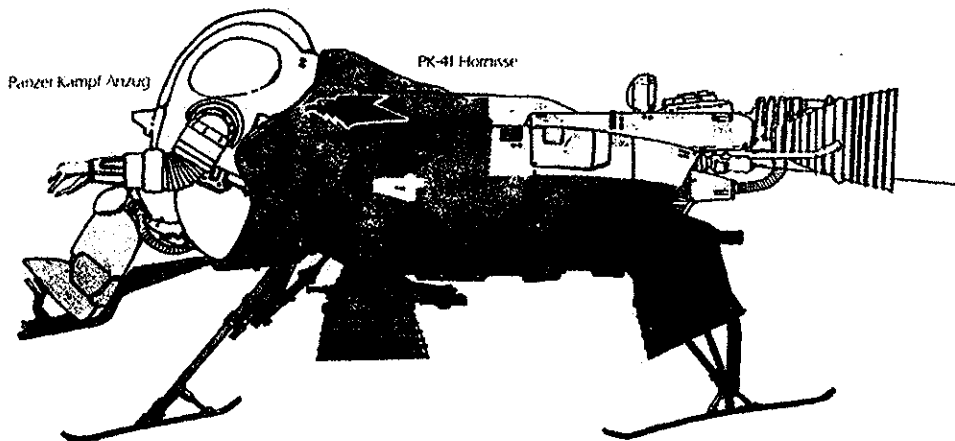
break and is completely surrounded. The 48th New South Wales Guard are sent in to break through and rescue the 34th. The German group 1 may enter the board on the east side, or set up in the building that contains hex 2404. The aircraft are allowed four extra weapons. The Australian group 1 is placed in the building that contains hex 2006. Australian group 2 enters on turn two on the west edge of the map. Victory Conditions: The Australians must move 5 A.F.S. off the west edge of the map. These units may not leave until turn 5. The Germans must stop this. This scenario lasts 10 turns.

#3 Operation: Fast Track

An assault upon a weak flank by the City of Darwin Yoemanry is not the complete surprise expected by the Australian Command. German group 1 may set up anywhere east of hex column 04XX. Australian group 1 enters through hex 07. Two of the three object counters are dummies. Australian group 2 enter on turn 4. The Australians get the initiative on turn one. Victory Conditions: The Australians must exit two units off the board via hex column 27XX, or destroy the German Object counter. The Germans must stop this. This scenario lasts 12 turns.

#4 Battle of McCormick's River.

The front line had stabilized and strengthened. Major Ed 'Madman' McCormick decided to attempt to break the local stalemate by crushing the German line. German group 1 sets up on map 4. German group 2 sets up north of the river. Australian group 1 sets up south of the river. The Australians get the initiative on turn one. The river is the dark line that starts on hex 07 and leaves on the east edge of the mapboard. See the Terrain Effects Chart for the effects. The hexes 0807, 1209, and 2007 are bridge hexes, and are considered clear. Any 'H' class units hit over a river hex are automatically destroyed. German units may escape off the north board edge. The Australians get half the victory points for these units. Victory Conditions: Standard victory points. One side must have 6 or more victory points, otherwise it is a draw. This scenario lasts 8 turns.



#5 Operation Super Hammer (Part 1)

Australian command begins a daring move. A direct assault to relieve the siege of New Canberra. The main body of the 3rd Mechanized division met the encamped 25th Panzer Group. German Groups 1 and 2 set up in the forest that contains hex 2008 or in the building containing hex 1607. Two of the Krote from this group may set up anywhere on map 4. German group 3 enters the north edge on turn 3, and group 4 enters the north edge on turn 5. Australian Group 1 enter the south edge of map 4, group 2 enters on turn 3, and group 3 enters on turn 5. Victory Conditions: Standard Victory points. Higher total wins. This game lasts 16 game turns.

#6 Operation Super Hammer (Part 2)

The 3rd Mechanized, after a bloody exchange, began to fall back into more favorable defensive terrain. When their relief arrived, the Australian withdrawal turned into a German nightmare. German group 1 sets up on map 3, between hex columns 16XX and 26XX. Group 2 arrives on turn 1, in the air. Australian group 1 sets up on map 3, between hex columns 05XX and 14XX. Group 2 enters on the west edge of map 2, on turn 4. The Nutrockers, on turn one, may appear(land) on any unoccuppide hex on map 3. They may take no action on the first turn on the ground. Victory Conditions: Standard Victory points. This scenario lasts 15 game turns.

#7 Breakthrough at New Canberra

Meanwhile, east of the city, a small armor unit sucessfully broke through to the city. German group 1 is placed anywhere on map 2, group 2 is placed on map 2, in or within 2 hexes of the building. Group 3 starts in the air, and group 4 enters the west edge of map 3 on turn 3. Australian group 1 enters the east edge of map 2 on turn 1, and group 2 enters the east edge of map 2 on turn 3. Victory Conditions: Standard Victory Points. If there are no German units on map 3 by the end of the game, the Australians get double the victory points. This scenario lasts 12 turns.

#8 Hold Out!

Supplies and Relief for New Canberra are on the way, but so are the German reinforcements. German group 1 enters on the east edge of map 2, and German group 2 enters on the south edge of map 4. Australian group 1 sets up anywhere but 4 hexes from each of the German entrance edges. Victory Conditions: If the Austarlians still have men on map 3 by the end of the game, they win. The Germans must stop this. This game lasts 14 turns.

#9 Assault New Canberra Supply Storehouse.

The Australians were slowly taking New Canberra, but the German resistance could not be stopped, unless the supplies from outside the city were stopped. German group 1 sets up anywhere on map 3. Groups 2 and 3 start in the air. Australian group 1 enters on the north edge of map 4. Group 2 starts in the air. Victory Conditions: Standard Victory Points. If one side is the only side that has units in the building on map 3, that side gets 4 Victory points. This scenario lasts 10 turns.

#10 Battle of New Canberra

January 11, 2885: The German forces in New Canberra defend

their last supply source in the city, a group of Military warehouses. After the loss of this supply center, German Command was forced to withdraw from New Canberra. German group 1 sets up in the buildings that contain the hexes 1309 and 1312. The following reinforcement groups enter on the hexes 0914 and 1714. Group 2 appears on turn 2, group 3 on turn 3, group 4 on turn 4, group 5 on turn 5, and group 6 on turn 6. Australian group 1 sets up anywhere but buildings 1309 and 1312. The following reinforcement groups enter on the hexes 0201 and 2301. Group 2 appears on turn 1, group 3 on turn 2, group 4 on turn 3, group 5 on turn 4, and group 6 on turn 5. Victory Conditions: A building is controlled by a player if the player is the only player with troops in the building. The winner of this scenario is the player who controls both building 1309 and 1312. Otherwise it is a draw. This scenario lasts 10 turns.



11.0 Historical Data -Descriptions of Weapons

Armored Fighting Suit (A.F.S.)-The A.F.S. was the first weapon of this type to be produced. Before the A.F.S., most forces were rather conventional, unarmored infantry and a few tanks. Their first appearance was in mid-June 2883, used against the troops of the Shutoral Government. The A.F.S. owned the battlefield until the arrival of the P.K.A.

Panzer Kampf Anzug (P.K.A.)-Although originally designed as a mobile cockpit for the Hornisse, the P.K.A. turned out to be a useful ground unit. This unit became the main ground force of the Shutoral troops early in the war, and remained so throughout most of it. Having no fixed weapon, the P.K.A. uses a hand held rocket, dubbed Panzerfaust after a similar weapon notorious from W.W.II.

Super Armored Fighting Suit (S.A.F.S.)-On Dec. 14 of 2884, the new weapon of the Australian Mercenaries was released. The S.A.F.S. was by far the most superior unit on the battlefield. More armor, better firepower and superb speed made this unit a suit to be feared.

Panzer Kampf Anzug Gustav (Gustav)-In response to the release of the S.A.F.S., the Shutoral forces designed the Gustav, a heavier, more armored P.K.A.. This new suit was armed with a laser, for the laser had shown its effectiveness in the A.F.S. and in the new S.A.F.S.. With a small amount of modification, a PK 41 could be combined with a Gustav.

PK 41 (Hornisse)-When combined with a P.K.A., the PK 41 was transformed into a Hornisse, a fast, armed aircraft that not only was a superb force deployer, but also the best aircraft in the skies. That is, until the arrival of the Falke.

Krote- The Krote, a driverless (remote, computer operated) assault scout, was used quite a bit throughout the war. Its versatility was recognized and used effectively by German forces, allowing it to remain, even after the arrival of the drone scout Neu Spotter.

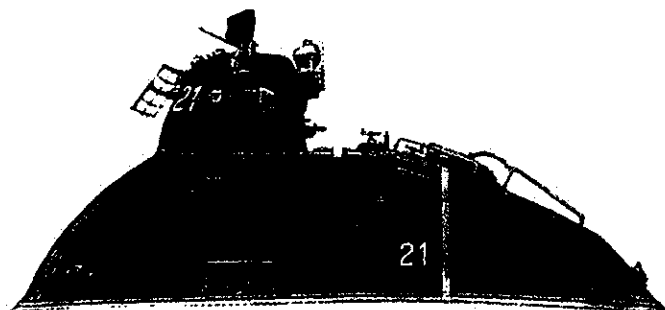
Heavy Armored Fighting Suit (Jerry)-The Jerry was a rather late development by the Australians. They were easier to produce, and required less repair and maintenance. The larger size and heavier armor would not allow an armored suit shape.

PK 40 / J-40(S)-The PK 40 was developed by the Shutoral forces in 2875. Soon after their use began, the Australians created the J-40(S), which was at first simply stolen PK 40s, repainted. Later the J-40(S) went into production, a blatant violation of universal patents and copyrights.

Neu Spotter-In March 2883, the German Weapon Development Service conceptualized the Neu Spotter, a hover-ing, driverless recon unit. Although unarmed, the Neu Spotter made up for this

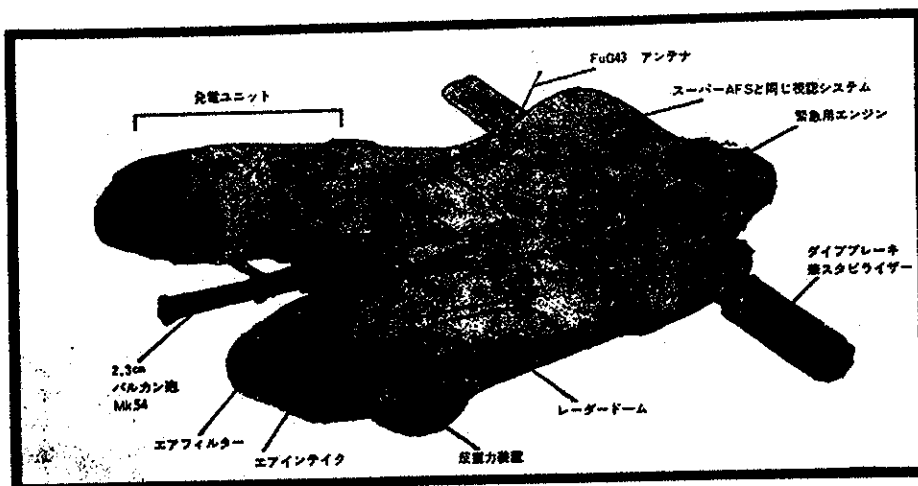
in speed, and the most highly advanced ECM and targeting computers made.

Nutrocker-In October 2884, the 300th Airborne Regiment went home for a refit. When it came back to Earth, they were armed with the newest equipment. This including the Neu Spotter, and the Shutoral's new hovertank, the Nutrocker. Armed with a large laser, and heavily armored, the nutrocker moved in excess of 90 km/hr.



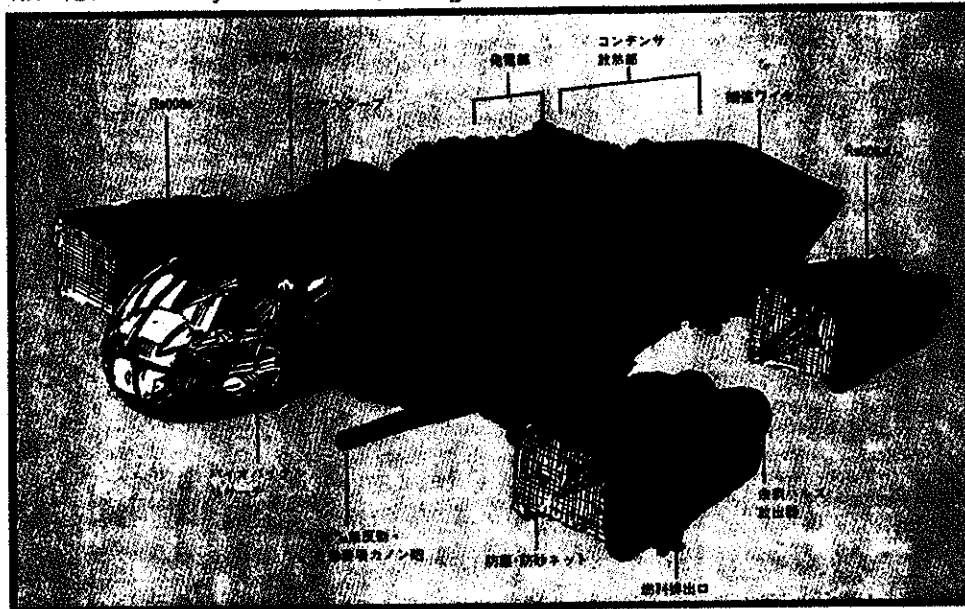
Dollhouse- In January 2885, the Mercenary's response to the Nutrocker was completed and released. This was the Dollhouse, a tank-like missile carrier. Not only did it sport nasty, long range missiles, but it was also armed with a large laser.

Falke- In 2885, the Mercenaries new attempt to control the skies was the Falke, and control the skies it did. Heavily armored, the Falke was one of the first aircraft to be armed with a laser.



XK-427 Firefly

(using some obscure dialect as a code)



Schenkel UD K38- Originally developed by the Shutorial government as a rough terrain vehicle, several problems led to their early sale to the public. They were bought by the Mercenaries on the black market, and used infrequently as attack units. After several dismal failures, the Schenkel found a home with the Mercenaries as mobile command posts.

At this date, Technical Data on the Sphinx, Oskar, and Fire Fly are classified, and unavailable. It is known that the Fire Fly is an experimental Anti-gravity aircraft, the Oskar is a rocket-armed scout vehicle, and the Sphinx is an attempt to hybrid a Nutrocker with Dollhouse-like Rockets.

Note: The above list does not include units under development at the time of printing, including the Shutorial Government's Krachenvogel, Pak Krote, and the PzKw 182 Heavy Tank. The Aussies will introduce soon their Gladiator (an insect-like, rocket-armed crawler), SAFS Raccoon, and actual trained pilots. Also, with production capacities overstrained and carnage high, soon one may see unarmored infantry, partisans and the like. SF3D Game #2 is planned for 1986.

S.F.3.D

Science Fiction 3-Dimensional began with an interest in Mr. Kow Yokoyama to design a realistic S.F. series of plastic model kits. It's "Original" because each kit came from a scratch-build creation of Yokoyama's. The kits win awards regularly. We hope you enjoy the game that much!

STRENGTH AT RANGE CHART

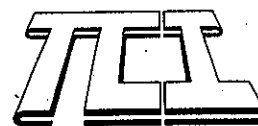
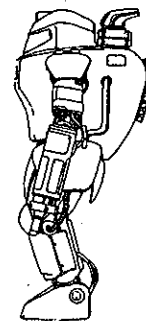
UNIT	WEAPON			RANGE																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Goblin	11	L	8	12	12	11	11	11	11	11	11										
SAFS Mk I	11	L	8	12	12	11	11	11	11	11	11										
SAFS Mk II	11	L	8	12	12	11	11	11	11	11	11										
AFS (S)	11	L	8	12	12	11	11	11	11	11	11										
AFS	8	L	8	9	9	8	8	8	8	8	8										
Jerry	8	L	8	9	9	8	8	8	8	8	8										
S. Stalker (232)	6	L	8	7	7	6	6	6	6	6	6										
S. Stalker (233)	6	L	8	7	7	6	6	6	6	6	6										
D. house	11	L	10	12	12	11	11	11	11	11	11	10	10								
Schenkel	7	L	10	8	8	7	7	7	7	7	7	6	6								
Gladiator	10	R	30	11	11	10	10	10	10	10	10	9	9	9	9	8	8	8	8	7	*
Green Buffalo	12	L	10	13	13	12	12	12	12	12	12	11	11								
Inf SQ	7	MG	4	7	6	5	4														
Plt (Cpn) SQ	7	MG	4	7	6	5	4														
ENG SQ	7	MG	4	7	6	5	4														
AAR Sq	7	L	7	8	8	7	7	7	7	6											
Seduce	5	L	8	6	6	5	5	5	5	5	5										
Ravin - Use Goblin	7	L	8	8	8	7	7	7	7	7	7										

AFS, SAFS 9 L 8 10 10 9 9 9 9 9 9
 SAFS II 10 L 8 11 11 10 10 10 10 10 10

UNIT SUMMARY CHART

UNIT	WEAPON			DEFENSE		MOVE	CLASS	ROCKETS	SMOKE	V P	# IN GAME
Goblin	11	L	8	3	B	4W	I	TOS x 3	—	4	12
SAFS Mk II	11	L	8	3	B	5W(12B)	I	—	—	4	12
AFS (S)	11	L	8	3	B	3W	I	—	—	3	3
S. Stalker (232)	6	L	8	2	C	8H	II	—	Smk	2	9
Gladiator	10	R	30	5	B	5W	II	R x 3	—	4	6
Green Buffalo	12	L	10	4	A	5C	II	—	Smk	5	3
Inf SQ	7	MG	4	5	B	(1)	Inf	—	—	4	20
Plt HQ	7	MG	4	4	B	(1)	Inf	—	—	6	6
Cpn HQ	7	MG	4	4	B	(1)	Inf	—	—	8	2
ENG SQ	7	MG	4	5	B	(1)	Inf	—	—	4	8
AAR Sq	7	L	7	3	A	(1)	Inf	—	—	3	8
Seduce	5	L	8	2	C	7C	II	—	—	2	8
Ravin	7	L	8	4	B	6C	II	—	—	4	12
Truck	—	—	—	1	C	7C	II	—	Smk	1	10
Raccoon	—	—	—	3	B	5W	I	—	—	4	2
Falke II	13	MG	9	4	A	4F	III	—	—	4	3
AFS	8	L	8	2	B	5W	I	—	—	2	30
SAFS Mk I	11	L	8	3	B	5W	I	—	—	3	30
Jerry	8	L	8	2	B	4W	II	—	—	3	15
D. house	11	L	10	4	A	6C	II	15R100x4	Smk	6	10
S. Stalker (233)	6	L	8	1	C	8H	II	—	Smk	2	10
Schenkel	7	L	10	4	C	2W	II	—	Smk	3	5
J40(S)	8	MG	6	3	C	2F	II	—	—	3	15
Falke	10	MG	9	4	A	4F	II	—	—	4	15

* Continued Until Max. Range



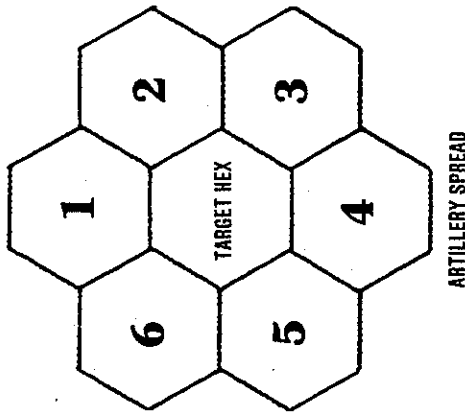
TWENTIETH CENTURY IMPORTS
 Copyright 1986 Twentieth Century Imports

TERRAIN CHART				
TERRAIN TYPE	W C H	MOVEMENT CODE	WEAPON TYPE L G R B P F M G	TERRAIN LEVEL
CLEAR	1 1 1	1 1 1	— — —	0
ROUGH	2 2 3	2 2 3	— — —	0
FOREST	2 3 3	2 3 3	— — —	1
CREST	+1 +1 +2	+1 +1 +2	— — —	0.5
LG. BUILDING	1	1	— — —	1
ROAD	1/2 1/2 1/2	1/2 1/2 1/2	— — —	—
TRAIL	1 1 1	1 1 1	— — —	—
RIVER	P P 3	P P 3	— — —	0
FORD	2 2 2	2 2 2	— — —	0
LAKE	— — 2	— — 2	— — —	0
SM. BUILDING	1 2 3	1 2 3	— — —	1
HILL	+2 +3 +3	+2 +3 +3	— — —	1
WALL	+1 +1 +1	+1 +1 +1	— — —	0.5

HIT MODIFICATION	
OVERRUN	+2
CLASS I	—1
CLASS II	+2
INFANTRY	—3
INDIRECT	+2
IMMOBILIZED	—2
GROUND VS. AIR	—
AIR VS. GROUND	—
NIGHT FIGHT (INF. ONLY)	RANGE 0 1-4 5+
SMOKE	—5
LASER	—5
(R. BOMB)	—4
ALL OTHER	—4

ARMOR RESISTANCE CHART	
# ROLLED	A B C
2	D D D
3	D D D
4	D D D
5	D D D
6	A A D
7	M M D
8	M M A
9	— A M
10	— — M
11	— — —
12	— — —
D	DESTROYED
A	ARMY DESTROYED
M	IMMOBILIZED
—	NO EFFECT
2	AUTO 'D'
	ROCKET +1

DOGFIGHT CHART	
# ROLLED	0 +1-2 +3-4 +5-8 +9-
1	2/4 4/5 2/6 2/8 2/9
2	2/2 2/4 2/4 2/6 0/7
3	0/2 0/3 4/4 0/4 0/6
4	2/0 0/2 0/3 0/3 0/5
5	2/2 2/3 0/2 0/2 0/4
6	4/2 4/2 3/4 4/3 4/3
ATTACKER LOSES / DEFENDER LOSES	



OBSERVATION CHART	
TO HIT #	
a	10
b	9
c	8
d	7
e	6

S.F.3.D
O R I G I N A L

OFF-BOARD ARTILLERY			
ARTILLERY TYPE	ATTACK STRENGTH	MAX. RANGE	ARTILLERY COST
I. R	0 HEX 10 8	2 HEXES	90
II. R	14 10	—	120
III. R	20 14	8	260

SMOKE			
UNIT	# OF SMOKE	RANGE	DURATION
D. house	∞	0	1
Green Buffalo	2	1	2
S. Stalker	2	1	2
Schenkel	3	2	3
Truck	2	1	2

STRENGTH AT RANGE CHART

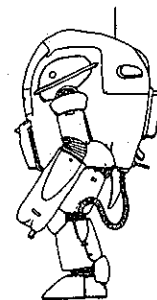
UNIT	WEAPON			RANGE																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PKA	10	PF	4	10	10	10	10														
Gustav	9	L	8	10	10	9	9	9	9	9	9										
Konrad	9	L	8	10	10	10	10	10	9	9	9										
Krote	7	MG	10	8	8	7	7	7	7	7	7	6	6								
Pak Krote	9	G	14	9	9	9	9	9	8	8	8	8	8	7	7	7	7				
Oskar	8	R	15	9	9	8	8	8	8	8	8	7	7	7	7	6	6	6			
Sphinx	16	R	120	10	10	10	10	10	12	14	16	★									
N. Rocker	13	L	20	13	13	12	12	12	12	12	12	11	11	11	11	10	★				
N. Rocker II	14	L	20	14	14	13	13	13	13	13	13	12	12	12	12	11	★				
Krachen Vogel	10	R	5	11	11	10	10	10													
Kafer	12	L	8	13	13	12	12	12	12	12	12										
F-boot	14	L	20	15	15	14	14	14	14	14	14	13	13	13	13	12	★				
Inf SQ	6	MG	5	6	6	5	4	4													
Plt (Cpn) SQ	6	MG	5	6	6	5	4	4													
Pnr SQ	6	MG	5	7	7	5	4	4													
AAR Sq	7	L	7	8	8	7	7	7	7	6											
Makel	5	L	7	6	6	5	5	5	4	4											
Pzkw 182 - Use Kafer	7	L	8	8	8	7	7	7	7	7	7										

UNIT SUMMARY CHART

UNIT SUMMARY CHART

UNIT	WEAPON			DEFENSE	MOVE	CLASS	ROCKETS	SMOKE	VP	# IN GAME	
Konrad	9	L	8	4	B	5W	I	PF×2	—	3	16
Pak Krote	9	G	14	3	C	4W	II	R×6 P	—	3	8
N. Rocker II	14	L	20	5	A	9H	II	— P	Smk	6	8
Krachen Vogel	10	R	5	2	C	16H	I	R×6 P	—	2	10
Kafer	12	L	8	5	B	5W	II	—	—	5	8
F-boot	14	L	20	4	A	12H	II	— P	Smk	6	4
Inf SQ	6	MG	5	5	B	(1)	Inf	—	—	4	12
Pit HQ	6	MG	5	4	B	(1)	Inf	—	—	5	6
Cpn HQ	6	MG	5	4	B	(1)	Inf	—	—	7	2
Pnr SQ	6	MG	5	5	B	(1)	Inf	—	—	4	6
AAR Sq	7	L	7	3	A	(1)	Inf	—	—	3	6
Makel	5	L	7	2	C	7C	II	—	—	2	12
Pzkw 182	7	L	8	4	B	6C	II	—	Smk	4	6
Kraftwagen	—	—	—	1	C	7C	II	—	—	1	10
Krote Ausf Pnr	—	—	—	3	B	4W	II	—	—	3	3
Sph. 69	—	—	—	2	C	8H	II	—	—	2	4
Salamander	12	MG	9	4	A	4F *	III	—	—	4	3
PKA	10	PF	4	2	B	5W	I	PF×2	—	2	30
Gustav	9	L	8	3	B	5W	I	PF×2	—	3	30
Krote	7	MG	10	2	C	5W	II	— P	—	3	8
New Spotter	—	—	—	0	—	20H	I	— P	—	3	10
Oskar	8	R	15	2	B	12H	II	R×2 P	—	3	10
N. Rocker	13	L	20	4	A	9H	II	— P	—	5	16
Sphinx	16	R	120	4	A	9H	II	R×5	—	6	8
PK 40	8	MG	6	3	C	2 F *	III	—	—	3	16
PK 41	9	MG	9	3	B	3 F *	III	—	—	3	30
Fire Fly Prototype	12	MG	9	3	C	3 F *	III	—	—	12	1
Fire Fly	9	MG	9	3	B	3 F	III	—	—	4	

* Continued Until Max. Range
P—Computer Controlled
Pnr—Engineer



TERRAIN CHART			
TERRAIN TYPE	MOVEMENT CODE	WEAPON TYPE	TERRAIN LEVEL
CLEAR	1 1 1	— — —	0
ROUGH	2 2 3	— — —	0
FOREST	2 3 3	-2 -1 -1	YES 1
CREST	+1 +1 +2	-2 -1 —	YES 0.5
LG. BUILDING	1	-2 -1 -2	YES 1
ROAD	1/2 1/2	— — —	—
TRAIL	1 1 1	— — —	—
RIVER	P P 3	-2 — —	0
FORD	2 2 2	-2 — —	0
LAKE	— — 2	-2 — —	0
SM. BUILDING	1 2 3	-1 -1 -2	YES 1
HILL	+2 +3 +3	— — —	YES 1
WALL	+1 +1 +1	-1 -1 -1	— 0.5

HIT MODIFICATION	
OVERRUN CLASS I	+2
CLASS II	-1
INFANTRY	+2
INDIRECT	-3
IMMOBILIZED	+2
GROUND VS. AIR	-2
AIR VS. GROUND	—
NIGHT FIGHT (INF. ONLY)	RANGE 0 0 1-4 -2 5+ -2
SMOKE	-5
LASER	-5
(R. BOMB)	-5
ALL OTHER	-4

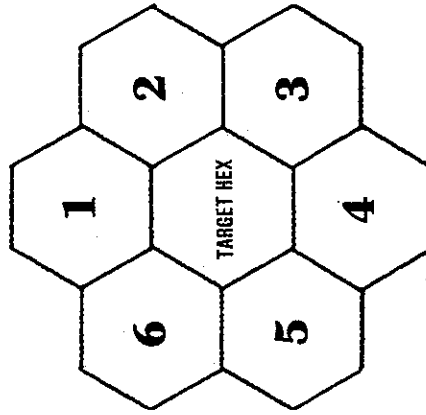
OBSERVATION CHART	TO HIT #
a	10
b	9
c	8
d	7
e	6

OFF-BOARD ARTILLERY			
ARTILLERY TYPE	ATTACK STRENGTH	MAX. RANGE	ARTILLERY COST
I. R	0 HEX 10	100	1
II. R	10 12	130	2
III. R	12 16	260	3
IV. RM	22 —	130	2

ARMOR RESISTANCE CHART	
# ROLLED	A B C
2	0 0 0
3	0 0 0
4	0 0 0
5	0 0 0
6	A A A
7	M M M
8	M M A
9	— A M
10	— — M
11	— — —
12	— — —
DESTROYED	
ARMY DESTROYED	
IMMOBILIZED	
NO EFFECT	
AUTO 'D'	
ROCKET +1	

ARMOR RESISTANCE CHART

DOGFIGHT CHART	
# ROLLED	0 +1~2 +3~4 +5~8 +9~
1	2/4 4/5 2/6 2/8 2/9
2	2/2 2/4 2/4 2/6 0/7
3	0/2 0/3 4/4 0/4 0/6
4	2/0 0/2 0/3 0/3 0/5
5	2/2 2/3 0/2 0/2 0/4
6	4/2 4/2 3/4 4/3 4/3
ATTACKER LOSES / DEFENDER LOSES	



ARTILLERY SPREAD

COMPUTER CONTROL CHART	
Defense Strength	UNDER CONTROL
N. Rucker	2 4
N. Rucker II	2 4
F. boot	3 4
Krote Aust Pnr	— 2
Pak Krote	1 2
Krote	2 3
New Spotter	— 2
Krachten Vogel	2 2

S.F.3.D

0 R I G I N A L

SMOKE			
UNIT	# OF SMOKE	RANGE	DURATION
Pzkw 182	∞	0	1
N. Rucker II	2	1	2
F. boot	∞	0	1
Krote Aust Pnr	3	1	3